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A COST STUDY OF OVERSEAS UNIVERSITY EDUCATION :
THE HONG KONG EXPERIENCE

by

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C O N T E N T S

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ABSTRACT

CHAPTER ONE	OVERSEAS EDUCATION FOR HONG KONG STUDENTS	
1.1	Review of the Situation : Global Trends and Hong Kong Situation	1
1.2	Importance of Cost Study of Overseas University Education	6
1.3	The Aims of This Study	7
1.4	Sources of Data	9
CHAPTER TWO	MAJOR ISSUES IN OVERSEAS EDUCATION	
2.1	Overseas Student Policy in the Selected Major Host Countries	11
	(i) Britain's Full-cost Fees Policy	
	(ii) Canada's Foreign Student Policy Development	
	(iii) Australia's Private Full Fee Policy	
	(iv) United States of America	
	(v) Political Consideration of Overseas Chinese Education in Taiwan	
2.2	Costs and Benefits of Overseas Students from the Perspective of Host Country	26
2.3	Costs and Benefits of Overseas Students from the Perspective of Sending Country	29
	(i) Cost Analysis	
	(ii) Benefit Analysis	
CHAPTER THREE	COST ANALYSIS FOR OVERSEAS EDUCATION FROM THE PERSPECTIVE OF SENDING COUNTRY	
3.1	The Problem	37
3.2	Cost Analysis of Overseas Education	39
3.3	Cost of Overseas Education	42
	(i) Tuition Fees	
	(ii) Living Costs	
	(iii) Traveling Expenses	
	(iv) Foregone Earnings	

3.4	Cost to Each Constituency	45
(i)	Host Country	
(ii)	Sending Country	
(iii)	Personal/family	
CHAPTER FOUR	ANALYZING COST OF HONG KONG OVERSEAS STUDENTS	
4.1	Britain	52
4.2	Canada	56
4.3	Australia	58
4.4	America	60
4.5	Taiwan	63
CHAPTER FIVE	RESULTS AND CONCLUSIONS	
5.1	Possible Bias of the Result	67
5.2	Summarizing the Data	68
5.3	Conclusions and Discussions	73
APPENDIX A	HONG KONG STUDENTS IN BRITAIN	81
APPENDIX B	HONG KONG STUDENTS IN CANADA	87
APPENDIX C	HONG KONG STUDENTS IN AUSTRALIA	91
APPENDIX D	HONG KONG STUDENTS IN AMERICA	93
APPENDIX E	HONG KONG STUDENTS IN TAIWAN	98
APPENDIX F	TRAVELLING EXPENSES OF HONG KONG STUDENTS	102
APPENDIX G	ENROLLMENTS AND EXPENDITURE OF HONG KONG UNIVERSITIES	104
BIBLIOGRAPHY		106

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ABSTRACT

Each year there are more than one million overseas students, world-wide, who are studying at the higher education level outside their own country. Since 1980s, a number of host countries have taken steps to restrict or regulate overseas student numbers, but at the same time some other countries have maintained open access to overseas students and have encouraged increased recruitment from overseas. So far, public funding is necessarily at the heart of public policy on overseas students.

The economic considerations relating to overseas students may be from the perspectives of the host country or the sending country. The larger economic realities such as policies regarding fees for overseas students and costs and benefits to host countries have received the bulk of attention. There is little attention to the detailed economics study of individual overseas students and their families. This study intends to fulfill this gap.

The present study tries to find out the costs of Hong Kong overseas university education, including costs of tuition, costs-of-living, costs of traveling and other costs, in the United Kingdom, Canada, Australia, United States and Taiwan. Attention will be paid to the apportioning of the cost burden among host country, home country and personal/family.

The first part of this study will review the global trend and Hong Kong situation of overseas university education. In the second chapter, there is a brief review of policy and enrollment trends in five major host countries. And also I shall look at different ways to evaluate benefits and define overseas educational costs with reference to different perspectives of the host country and the sending country. The third chapter will provide a methodology of costing overseas education according to the 'ingredients approach'. The fourth chapter will carry out a case study on Hong Kong in evaluating the economic costs resulting from overseas university education from 1976 to 1986. In particular, the issue of the apportioning of the cost burden among host country, home country and individual student will be considered. The final chapter will analyze the cost data and provide a comparison of the unit costs of Hong Kong overseas university study in five major host countries - U.K., U.S.A., Canada, Australia and Taiwan; and will compare these costs with the costs of local university education. Also results of the analysis and discussions on these results will be presented in this chapter.

There are six major conclusions in this study : (1) For all five host countries, the total costs are increasing over time; (2) for all host countries except Taiwan, the percentage share of tuition fees is increasing and the proportion of living costs also appears the highest over time; (3) in Taiwan, the total costs are always much lower than the others. Also the Taiwan government shares ten to

twenty percent of total costs of overseas education; (4) the support of overseas students by the US has included several sources : universities, private sponsors, and government. In contrast, the dominating supporter of overseas students in U.K., Australia, Canada and Taiwan is the central government; (5) the Hong Kong government only contributed a small portion of funding in financing Hong Kong students in U.K. and very little in other countries; (6) approximately two-thirds to one hundred percent of the overseas students used personal/family funds as their primary source of funding.

CHAPTER ONE

OVERSEAS EDUCATION FOR HONG KONG STUDENTS

1.1 Review of the Situation : Global Trend and Hong Kong Situation

At the end of the 1960s, approximately half a million students were enrolled in institutions of higher education outside the borders of their home country, as compared, for instance, with an estimated of 50,000 in 1925 (Myers 1972 P.3). In 1980 the total number of overseas students worldwide has approached the million mark, with 325,000 studying in the United States, 114,000 in France and 62,000 in the Soviet Union, the top three 'receiving' nations (Altbach 1987). On the other hand, in the same year the great majority of all foreign students (about three quarters) came from developing countries. Over 8 out of every 10 of them were studying in North America, Europe and the Soviet Union (Coombs 1985). Tiny Hong Kong, which is one of the leading countries of origin, with near 30,000 students in 1985 studying abroad, ranked in the list of top ten from 1975 to 1985 (UNESCO 1978/79, 1983, 1987).

For many sending countries, they need a large amount of foreign exchange to pay for the increasing outflow of students

overseas. At the same time, the majority of parents of privately sponsored overseas students are finding it increasingly difficult to meet the escalating costs of their children's overseas education, particularly in the developed host countries of the West. Hence it is important to study the costs of overseas education in order to improve the efficiency and control the costs.

For the case of Malaysian overseas education, it was estimated that approximately Australian Dollar 1.7 billion flew annually out of the Malaysian economy to meet the tuition and living costs of its overseas students. This compared with the total budgetary allocation for Malaysia's seven universities of A\$ 1.5 billion over the period from 1981 to 1985 (Smart 1988). It therefore constituted a significant budgetary constraint, affecting priorities in the education budget. Malaysia's national education system could not satisfactorily provide all the country's educational and training needs, hence the Malaysian students study overseas. The transfer of resources abroad in this context would constitute a constraint on the national education system as well as on the country's overall economic condition.

The great majority of overseas students (more than two-third) came from developing countries in Asia, Africa and South America. The top five countries of origin, in descending order, were China, Iran, Malaysia, Greece and Morocco in 1985. Hong Kong is the top sixth

country. However, if the total population is also taken into consideration, Hong Kong is the place having the second highest ratio of students per capita studying abroad. This is one of the reasons to choose Hong Kong as a case study of cost analysis for overseas education. The distribution of the leading countries of origin, with 20,000 or more students studying abroad and the ratios of students overseas to 1,000,000 population, are listed in Table 1.1.

Table 1.1 Overseas Students : Major Countries of Origin with over 20,000 Abroad and the Ratios of Students Overseas to 1,000,000 Population in 1985

Countries	Overseas Students Per Million Population	Total No. of Overseas Students
Jordan	11,390	24,285
Hong Kong (2)	5,500	29,673
Greece	3,499	34,086
Malaysia	3,072	40,493
Morocco	1,618	33,094
Iran	1,218	41,043
Korea	540	22,468
China	41	42,481

Sources : (1) UNESCO 1987 Statistical Yearbook
(2) Table 1.2

In Hong Kong, there were only two institutions of higher education offering degree courses before 1984. Luk (1989 p.166) pointed out that for the thousands of students who desired tertiary education but were unwilling or unable to be admitted to one of the local universities, studying abroad was a popular choice.

The flow of Hong Kong students in the higher education level across international borders is increasing steadily and rapidly over the past three decades. Among those who have studied abroad, around 99 percent have gone to United States, Canada, Australia, United Kingdom and Taiwan. A rough picture of the phenomenon is displayed in Table 1.2.

Table 1.2 Total Enrollments of Hong Kong Students in Courses of Higher Education and Further Education in Five Host Countries

Host Countries	Year			
	1970	1975	1979	1985
U.S.A. (1)	9,040	11,930	9,900	9,193
Canada (1)	2,419	6,644	5,008	7,723
Australia (1)	1,045	572	894	1,687
U.K. (2)	2,072	4,434	6,954	6,935
Taiwan (3)	2,500*	2,626	2,599	3,358
Sub-Total	17,060	26,206	25,355	28,896
Total Overseas Student Population (1)	17,260	26,306	25,616	29,673
Overseas Students of 5 host countries as % of total overseas student population	98.9	99.6	98.9	97.4

* Estimated figures

Sources : (1) UNESCO Statistical Year book 1972 - 1988 editions
 (2) British Council Statistics of Students from Abroad in the United Kingdom 1971 - 1985 editions
 (3) Bureau of Statistics Education Statistics of the Republic of China 1973 - 1985 editions

Recently, the Hong Kong Government has had a plan to accelerate the growth of tertiary education. As a result, the government will face rising public cost to fund rapid development in tertiary education. The decisionmaker faces a set of alternatives from which choices may be made, for instance, to provide more first-degree places in local universities or to allocate more resources in supporting overseas students. Hence government should consider to compare the total costs of overseas university education and local university education - the cost of sending a student overseas or educating the student at home, in order to allocate resources to one with the largest effectiveness relative to costs. Lastly, the government must compare costs and benefits for the allocation decision.

The magnitude of Hong Kong's overseas student phenomenon, and thus its cost, should be issues of considerable concern to the Hong Kong society. In effect, for every one student studying a higher education course locally (total Hong Kong higher education population 30,000) there were one being educated abroad (30,000) in the year 1985/86. It is estimated that the majority of overseas students were supported privately by individual student or his/her family. If tuition fees and cost-of-living in 1985 reached US\$ 10,000 for each overseas student per year, then Hong Kong overseas students would cause a total of roughly US\$ 300 million in foreign exchange loss in that year.

Another consequence of large flow of students studying abroad is an increase in emigration to the host countries of skilled labor as students adjust their status to that of immigrant (Agarwal & Winkler 1985). During the past three decades, overseas student migration to the developed host countries has increased rapidly. The annual average rate of non-returning students by country in U.S. ranged widely from 4.25% to 62.62% between 1962 to 1976. For Hong Kong, the rate was 18.05% (Huang 1988). The overseas student's decision to establish permanent residency in host countries is essentially a migration decision. This has been a perennial problem for many developing countries and has been criticized as a problem of brain drain by many of sending governments. However, the problem of brain-drain may affect the cost analysis of overseas education which will be discussed in chapter three.

1.2 Importance of Cost Study of Overseas University Education

According to the previous discussion, there are several reasons that cost study of overseas university students is a key issue in the overseas education :

- (1) Overseas students in higher education constitute the largest proportion of the overseas students. For example, in 1984/85, more than 93% of overseas students in America were studying in universities (IIE Open Doors 1985), and in Canada, 75% of all overseas

students were undergraduates in university (Overseas Students Trust 1987 Appendix D);

- (2) to the host country, cost of subsidy to overseas students is undoubtedly the main reason for the full-cost fees policy and government policy in restricting the number of overseas students;
- (3) to the sending country, the cost of overseas study may be seen as a kind of foreign exchange loss and is clearly a connection with the burden of private overseas student's family;
- and (4) to the sending governmental education policy, overseas study may connect with educational needs that cannot be met at home or which face pressure for openings in the universities. Policymakers should recognize the costs of overseas university education in choosing whether to build new universities or to allocate more money in supporting overseas students.

1.3 The Aims of this Study

The specific aims of this study are listed as follows :

- (1) to identify a conceptual framework wherein overseas education costs from the perspective of sending country can be comprehensively described, evaluated and linked

for analytic purposes;

- (2) to carry out a case study on Hong Kong in evaluating the economic costs resulting from overseas university education;
- (3) to compare the unit costs of Hong Kong overseas university study in five major host countries - U.K., U.S.A., Canada, Australia and Taiwan; and compare these costs with the costs of local university education.

The above five host countries are chosen for this study because they are the major host countries for Hong Kong. In particular, each of the five countries is recently struggling with the issue of how to allow overseas students to bear an appropriate share of the costs of overseas education without diminishing access and opportunity.

For the purpose of this study, the university education is defined as the formal full-time study of Bachelor degree courses in university. The students in the following first degree courses in further education institutes (Britain), post-secondary institutions (Canada), advanced education institutes (Australia), and community colleges (U.S.A.) are excluded in this study.

1.4 Sources of Data

The information of Hong Kong overseas students in this study are drawn mainly from the following official sources :

- (a) United Kingdom : British Council Statistics of students from Overseas in the United Kingdom,
- (b) Canada : Statistics Canada International Student Participation in Canadian Education,
- (c) Australia : Commonwealth Tertiary Education Commission Triennium Report,
- (d) United States : Institute of International Education Open Doors,
- (e) Taiwan : Bureau of Statistics Educational Statistics of the Republic of China.

The above data was selected between the period from 1976 to 1986. Some characteristics of the Hong Kong student population in the five host countries will be identified, for example :

- (a) total number of Hong Kong overseas university students in each host country;
- (b) number of Hong Kong overseas students at university first-degree level;
- (c) distribution of Hong Kong overseas university students

among different fields of study.

Other important sources of information about the tuition costs and cost-of-living are obtained from the following sources :

- (a) United Kingdom - Careers Research and Advisory Centre
Graduate Studies,
- (b) Canada - Von Zur-Muehlen, Max Foreign Students in
Canada and Canadian Students Abroad,
- (c) Australia - Hang Seng Bank University Guide of Australia,
- (d) United States - Institute of International Education
Costs at US Educational Institutions.

CHAPTER TWO

MAJOR ISSUES RELATING TO COSTS OF OVERSEAS EDUCATION

During the end of the 1970's, most Western European and North American governments concerned much on the high subsidy costs of overseas students from host country and the rapid increase in overseas student enrollment. Since then, a number of host countries have taken steps to restrict or regulate overseas student numbers, by means of quotas or differential fees. On the other hand, some other countries have maintained open access to overseas students and have encouraged increased recruitment from overseas. The first section of this chapter provides a brief review of policy and enrollment trends in five host countries with different overseas student policy.

Another central question is : Who will pay the costs and who will get benefits ? Home and host countries are equally concerned with the same question, but they view it from quite a different angle. The next two sections will examine the issue of costs and benefits from both perspectives of the sending and host countries.

2.1 Overseas Student Policy in the Major Host Countries

Policies of host governments play a crucial role in determining the number of overseas students, the costs of overseas study, and the openness of access to different levels and courses of

study. Some countries were concerned that the growing numbers of overseas students would either displace home students or distort the balance between home and overseas students in particular institutions or subject areas. Other countries were concerned that the flow of overseas students was, in effect, disguised immigration and would impose burdens on the domestic labor market. A number of the major host countries have examined their policies relating to overseas students and several have implemented changes - usually in the direction of restricting access and raising costs. Britain is the most dramatic example. Canada and Australia have also looked into the costs and benefits of overseas students, and have either restricted access and/or increased costs. The United States does not have a 'national' policy concerning overseas students. Taiwan has traditionally maintained a firm policy to recruit overseas Chinese students to higher education since 1951.

(i) Britain's Full-cost Fees Policy

In the early 1960s, the total number of overseas students studying in Britain universities was relatively small. At that time, British universities charged the same fees to all students, regardless of local or overseas.

As the number of overseas students grew, British Government felt that it was imposing an excessive burden on the British taxpayer,

and introduced differential fees for overseas students in 1967. The fees were still substantially subsidized by British Government and the number of overseas students continued to grow until 1979 when there were about 88,000 overseas students (Williams 1984). In the academic year 1980/81 a further change was introduced, and all newly-recruited overseas students were required to pay fees which covered the 'full-cost' of their university education. Students from the European Community were exempted from this rule and their number was about 4,000 in 1981/82 and 4,429 in 1984/85. However, Commonwealth students, such as students from Hong Kong, were not exempted (Stewart 1989 p279) .

In 1983, a series of ameliorative measures was introduced to help overseas students from Commonwealth countries. This became known as 'Pym Package', after the then Foreign Secretary, Francis Pym. This consisted of an additional £45 million over a three-year period for scholarships of various types, including country-targeted schemes. The main beneficiaries are students from Malaysia, Hong Kong and Cyprus. The 'Pym Package' also included an injection of £100,000 for three years into the British Council's budget to finance a new unit concerned with the promotion of higher education overseas (UKCOSA 1986 p.18).

Britain's full-cost fees and targeted scholarship support had a considerable impact upon enrollment levels and patterns since 1980. Enrollment level of overseas students from commonwealth countries

dropped rapidly since the introduction of "full-cost" policy in 1980. However it stabilized after 1984 -the introduction of "Pym Package" (Overseas Students Trust 1987). There is clearly a connection between government policy and trends in enrollment. Full-cost fees are undoubtedly the main reason for the drop in demand since 1980, just as the subsequent increase in scholarship provision has had some positive influence on enrollment.

(ii) Canada's Foreign Student Policy Development

Canada has no comprehensive national policy on overseas students, since fees and admissions policies are a provincial, rather than a Federal Government responsibility. Fees are set either by provincial governments or by individual institutions under an overall funding framework established by each provincial government. Responsibility for providing financial assistance is shared: while the federal government is responsible for most of the official awards, a few provinces (most notably Quebec) have initiated their own scholarship programs, and institutions invariably dedicate some funds to overseas student support through both scholarships and research assistantships for graduate students (Holroyde 1986).

Since 1976, seven of Canada's ten provinces have charged differential tuition fees for overseas university students. Overseas students have to pay from 1 and 1/2 to 13 times the domestic student

fee. The increase in fees has led to decline in overseas student numbers, particularly in Ontario and Quebec (Overseas Students Trust 1987 Appendix D).

In the late 1970s, overseas student issues have been given many attention in Canada, either in policy-making circles or in wider public debate.

Some criticisms claimed that overseas students were taking up as much as US\$ 1 billion in educational facilities and causing thousands of Canadian students to be rejected from important courses. Other criticized that although students with visas might leave the country after graduation, they easily obtained landed-immigrant status and qualified for grants, scholarships, loans and other benefits originally set up for Canadian students. Some people became alarmed that most of the overseas students were enrolled in university courses such as engineering, medicine, computer science and mathematics, the courses most vital to the future of Canada's economy (South China Morning post 29-12-1979, Hong Kong Standard 16-12-1979).

Faced with rising educational costs and in response to public concern, many provincial governments acted unilaterally in the late 1970s and early 1980s by instituting differential fees for overseas

students. At the same time, the federal government tried to limit international student numbers in tertiary institutions and with strict quotas in popular programs such as the health sciences and business (Tillman 1986).

In 1986, the report of Special Joint Committee of the Senate and House of Commons on Canada's international relations, 'Independence and Internationalism' was published. It contained a brief that overseas students constituted an important asset for Canada not yet sufficiently recognized in terms of improving trade opportunities, increasing cultural contacts and affecting overseas policy. It was recommended that both the federal government and the provincial governments prepare statements of goals and objectives as they related to overseas students in their respective areas.

(iii) Australia's Private Full Fee Policy

Up to 1974, private overseas students paid tertiary fees on the same basis as Australian students. In that year, the Labor Government under Whitlam abolished fees for all students but imposed a quota of 10,000 for all overseas students in Australia. In 1979 an Overseas Student Charge (OSC) of around 25% of the 'full cost' of tertiary education was imposed. This was to be collected at the time of issue or renewal of the student visa. The OSC was introduced

because it was felt that Australia's policy on overseas students was not meeting the country's foreign aid and foreign policy objectives (Lim 1989).

All levels of the Australian education hosted some overseas students. The largest proportion of the overseas student population in Australia's universities was studying at the undergraduate and post-graduate levels.

In 1981, the Commonwealth Tertiary Education Commission of Australia estimated that overseas student numbers increased from about 8,400 in 1980 to about 10,000 in 1981. It was believed that such numbers could be accommodated without displacing well-qualified Australian students. In 1982, universities and colleges of advanced education reported that there were some 12,000 overseas students in higher education courses in Australia. In the event, the increase in overseas student numbers in the 1982-84 triennium has been much greater than that anticipated by the Commission.

Overseas students usually tend to concentrate within a small number of universities and in relatively expensive faculties. The Commission (1984 vol.1 part 1 par.4.61) has estimated the annual recurrent cost to the Australian Commonwealth Government of providing tuition for overseas students to be about A\$ 100 million. This figure

includes equipment and capital costs, the costs to higher education institutions enrolling overseas students.

The issues surrounding the access of overseas students to tertiary education in Australia resulted in the establishment of the Committee of Review of Private Overseas Student Policy in September 1983. This committee produced its report (the Goldring Report) in March 1984, and its main recommendations were that the Overseas Student Charge should be continued and set at a third of educational costs for local student and that : (1) the number of overseas undergraduate students enrolled in any tertiary institution should be limited to between 5 and 10 % of the total number of full-time undergraduate enrollments in that institution; (2) the maximum number of overseas undergraduate students enrolled in any one course in a tertiary institution should be limited to 25 % of the full-time enrollments in that course, and (3) the guaranteed student approval system, whereby overseas countries were given student quotas, should be abolished and the students admitted purely on academic merit.

Three months later, in June 1984, another report the Committee to Review the Australian Overseas Aid Program (the Jackson Report) was released. The Report made recommendations on educational aid and the way Australia should deal with overseas students. Its major recommendations include : (1) a vastly expanded scholarship program; (2) a different geographical and academic composition for the

scholarship scheme; (3) the development of overseas education as an export industry; (4) no conflict in having Australian educational expertise being used for aid and trade purposes.

The Jackson Report and the Goldring Report differed in their advice on how the Australian Government should treat overseas students. The Goldring Committee argued for a subsidy for overseas students, on the grounds of the economic, political and cultural benefits they bring to Australia, but the Jackson Committee recommended a shift towards full-cost fees, combined with a selective scholarship policy, and vigorous efforts to promote higher education as an export industry.

After a period of consideration, the Australian Government introduced a new policy for overseas students in March 1985. It made provision for three standards of overseas students :

- (a) Government-sponsored students whose tuition was fully paid by the Australian Government out of the aid vote.
- (b) Private students who paid a proportion of the cost of their place but whose numbers were limited by quota to an annual entry of 2,000 at the secondary and 1,500 at the tertiary level.
- (c) Full fee-paying private students should be beyond the above quota. There were about 500 of these students in Australia

in 1986 (Commonwealth Secretariat 1986).

In relation to point (b), subsidized overseas students may enter Australian higher education institutions directly or from Australian secondary level transferred to tertiary level, predominantly higher education.

The Overseas Student Charge was retained, and increased to cover 35% of full costs in 1986 and 45% in 1987 (Commonwealth Tertiary Education Commission 1981, 1984, 1987).

Table 2.1 Tuition Fees for Overseas Students
in Australian Tertiary Education
(in Australian Dollars)

		1980	1984	1985	1986	1987
Undergraduate	Medicine	2,500	2,900	3,100	4,340	5,506
	Other	1,500	2,150	2,500	3,500	4,666
Postgraduate		Same as undergrad 3,350			Same as undergrad	

- Sources : (1) A.C.U. Bulletin of Current Documentation 1985 no. 67 p. 28
(2) Commonwealth Secretariat 1986 Commonwealth Student Mobility Fifth Report Attachment 1
(3) Tracey 1986 "Australia" edited by S. Shotnes in International Comparison in Overseas Student Affairs UKCOSA pp. 6-7

From 1986, institutions are also able to offer overseas students places at full cost, either for courses specifically designed for them or in normal degree courses, within guidelines established by

the Government. As a result of the policy to allow entry of overseas private students who are willing to pay the full cost of their tuition, the Government estimated, for the export of Australian education services which, could be earning A\$100 million or more in foreign exchange within three years (Commonwealth Secretariat 1986 : Commonwealth student Mobility Fifth Report).

(iv) United States of America

Among the advanced societies, the United State's share of overseas students has steadily increased. Currently, it receives over one-third of all overseas students (IIE Open Doors various editions).

Table 2.2 Percentage of U.S. Foreign Students to the World Total Foreign Students, Selected Years

	1978	1979	1983	1984
% of World Total	31.3	34.2	30.8	36.9
Sources : IIE <u>Open Doors</u> various editions				

In absolute numbers, the United States led in enrollments, reporting two and a half times more overseas students than the Second highest host country, France (338,894 compared to 130,224) in 1983

(Open Doors 1986/87 Table 1.5).

Among the leading host countries for overseas students, America is perhaps the only country which neither has nor is likely to have, a national centralized policy to regulate their flow (Chishti 1984).

There are at least three reasons why the U.S., despite predictions of the large number of overseas students, has not shown its concern with the similar restrictive policy as other major host countries have. First, although the number of overseas students in the U.S. is much larger than that in any other country, overseas students as a percentage of the total enrollment make up as a little over 2%, while in most of the other host countries it ranges between 5% to 20%. This means that in U.S.A. there is no significant "displacement effect", i.e., overseas students are not occupying home student's positions in colleges/universities. Second, in the U.S.A. the tuition fee is relatively higher than that in most European countries, hence, subsidy is relatively low. Third, the projected declining enrollment of American students is expected to widen the gap between the marginal and average cost, and more overseas students can help to keep the gap low (Agarwal & Winkler 1985).

The American overseas student policy is an open doors one. Recently, an emphasis on the importance of American foreign policy of

scholarship diplomacy has led to the creation of new scholarship programmes, particularly for Central and Latin American. In 1984, a total of US\$ 742 million scholarship has been created to support about 9,000 overseas students studying in the U.S. Budget proposals for 1986 included substantial additional funds for educational exchange programmes, especially through Agency for International Development (AID), because they have been seen as good investments for the U.S. (Overseas Students Trust 1987 Appendix D)

(v) Political Consideration of Overseas Chinese Education in Taiwan

In Taiwan, the Overseas Chinese Affairs Commission (僑務委員會) coordinates the promotion of overseas Chinese culture and education and assistance for overseas Chinese students. The Government has a firm policy to help overseas Chinese to seek higher education in Taiwan since 1951 (Ministry of Education, the Fifth Education Report of the Republic of China). In recent years, the number of overseas Chinese going to Taiwan for higher education has been on the rise. The Commission takes care of the living and education problems of students from overseas Chinese communities, keeps contacts with those students after their graduation, helps them set up alumni associations after they return to their overseas Chinese communities, and assists them in developing their own careers (The Overseas Chinese Affairs Commission 1988).

Table 2.3 Number of Overseas Chinese Students
in Universities, Colleges
Selected Years

Year	1984/85	1982/83	1981/82	1980/81	1979/80	1978/79	1977/78	1975/76
Overseas Chinese Students	11,007	10,879	10,590	9,752	9,106	8,681	8,261	7,374

Sources : Bureau of Education Educational Statistics of the Republic of China
various editions

Unlike in most other countries, academic and living costs of overseas Chinese students in Taiwan are financed partly or wholly by Taiwan Government through the Overseas Chinese Affairs Commission. The Commission's support is usually in the form of scholarships (from NT\$2,000 in 1962 to NT\$5,000 recently) or assistantships (from NT\$500 in 1974 to NT\$1,500 per month recently) to cover living costs. This brings the total number of overseas Chinese students who receive their assistantships from the Commission to around 6,500 in the 1980s. For travel costs, overseas Chinese students supported by the Commission presumably get single ticket back to their countries. For each academic year, the maximum number of tickets provided is 200. Furthermore, the commission affords one-third of the insurance premium for the health service (Ministry of Education The Fifth Education Report of the Republic of China). The tuition fees may reduce to two-third of the normal fees for overseas Chinese. The subsidized cost for overseas Chinese students in Taiwan for 1984 was NT\$228 million, NT\$246 million in 1985 and NT\$268 million in 1986 respectively.

In fact, the vast majority of the overseas Chinese students studying in Taiwan were financed by Taiwan Government.

Overseas Chinese students who decided to select Taiwan as their place of study have been increasing in numbers over the postwar period. There are four reasons for the Taiwan official policy to recruit overseas Chinese to study in Taiwan. First, after the Kuomintang regime was forced to move to Taiwan in 1949, the Taiwan Government needs to maintain a modicum of political influence over overseas Chinese - for which purpose the contacts and goodwill provided by past study in Taiwan. Secondly, the overseas Chinese education can be seen as part of an 'anti-communism' effort to promote the Three Principles of People Nationalism, Democracy, and the People's Livelihood. The third reason for encouraging overseas Chinese students from overseas to study in Taiwan is to increase their understanding of and a sense of belongingness to Taiwan. Through study in Taiwan, overseas Chinese may build up connection with other overseas youngsters and local teenagers. In addition to the above reasons, perhaps another reason for Taiwan as a major destination of overseas Chinese students is the increased political visibility of the Republic of China. Taiwan has sought to establish a political presence through the promotion of overseas Chinese education (Liang 1959, The Fourth and fifth Education Report of the Republic of China, Tai 1963).

2.2 Costs and Benefits of Overseas Students from the Perspective of the Host Country

The economic considerations relating to overseas students may be in two folds : (1) macroeconomics and (2) microeconomics view of overseas study (Altbach 1989). The larger economic realities such as policies regarding fees for overseas students and costs and benefits to institutions have received the bulk of attention (The Right Mix : The Report of the Commission on Foreign Student Policy in Canada 1981, The Berendzen Report : Foreign Students and Institutional Policy U.S.A. 1982, The Goldring Report-Australia 1984, Commonwealth Student Mobility-Commonwealth Secretariat 1984, 1985, 1986). The microeconomics of overseas study concerns the detailed economics of individual overseas students and their families.

Study abroad today is a big business. There are about a million students in tertiary education studying in a country other than their own. Beyond that, there are many more students at secondary level, short language courses, commercial programs, industrial training and the like who do not get counted in the higher education figures. The British Government estimated the net cost of subsidizing overseas students by the British Government in higher and further education to be between £110 million and £130 million in 1978-1979 (Williams 1982 p.54). Blaug (1981) argued that the long-run marginal costs of overseas students subsidized by British Government

were close to the average costs for all students, since overseas students tended to be concentrated in high cost courses in science and technology. He estimated the total net cost of subsidy for all overseas students from British Government in 1979-1980, before the introduction of full-cost fees, to be £200 million.

In Australia, the Goldring Committee estimated that the net cost of subsidizing overseas students, after allowing for payment of the overseas student charge, was about A\$70 million in 1983. Throsby (1986) used a different method of calculating costs, but arriving at a similar estimate.

Winkler (1984) estimated that the subvention in California from state to overseas students was between US\$36 million and US\$55 million in 1978. He also projected the total subvention would reach US\$100 million in 1990.

Recently, Williams (1987) estimated that the total amount of educational expenditure of global overseas students in host countries including living costs and travel may well add up to £8,000 million or US\$12,000 million.

On the benefit side, Mace (1987) reappraised the costs and benefits of overseas students. He gave greater weight to the benefits, both educational and economic, of recruiting students from abroad.

Rough estimates suggested that overseas students in Britain might spend nearly £1 billion a year which makes a significant contribution to the balance of payments, and boosts employment in the host country. In fact, that the introduction of full-cost fees in Britain led to 'buy British last' Campaign in Malaysia was a powerful reminder of the indirect links between overseas students and foreign trade. Furthermore, at a time of declining domestic demand, overseas students would enable institutions to maintain their size and to reap economies of scale.

In Canada, The Ontario Federation of Students stated that contributions to the Canadian economy made by overseas students may range between C\$363 million and C\$454 million, excluding tuition. Tuition expenditures might add another C\$200 million or more to this figure. A precise accounting of expenditures by overseas students would also have to take into account several additional factors, such as purchases by family and friends while visiting Canada (Holroyde 1986).

Chishti (1984) in his article attempted to analyze the economic costs and benefits of educating overseas students in the United States. According to his analysis the total tuition revenues paid by overseas students were about 37% of the total U.S. costs involved in their education for 1980/81. The resulting benefits over

average cost was around US\$1,200 million. Furthermore, estimates of long-run net marginal benefits over marginal costs was US\$2,000 million.

2.3 Cost and Benefit Analysis from the Perspective of Sending Country

(i) Cost Analysis

Economists have a number of ways of examining costs. Different types of analyzing require different measures of cost and different analytical techniques. Because of the interest in cost analysis, educational cost studies have increased in number, particularly within the World Bank (1978), and UNESCO (1972). They have together developed methodological guidelines for the estimation and analysis of costs in education projects and have commissioned several case studies of educational costs. A number of methodologies of cost analysis in educational planning have also appeared in recent years (Coombs & Hallak 1987, Tsang 1988, Woodhall 1987a) .

This section looks at different ways in defining overseas educational costs with reference to the economic approach of cost concept (Samuelson & Nordhaus 1985).

(a) Average vs Marginal - Average cost, often called unit cost,

simply represents total cost divided by the total number of students.

An important question about the measurement of unit cost is the difference between the unit cost per overseas student and per returned overseas graduate. Since an overseas student may decide to remain abroad after study, it will be a loss to the sending country, and the unit cost from the perspective of the sending country has to be adjusted accordingly.

Suppose, for example, that the total cost of educating N overseas students is TC, then the unit cost per overseas student would be :

$$AC = TC \times 1/N \text{ -----(1)}$$

If the measurement of unit cost changes to the basis of per returnee, then :

$$AC' = TC \times 1/N' \text{ -----(2)}$$

where N' be the number of returned overseas graduate.

In this case, the value of unit cost will depend on the rate of returnee. Differences between AC and AC' may be significant if many overseas students decided to stay permanently in the host country.

The marginal cost of overseas student is the cost of producing one extra overseas student. It is the extra cost incurred when total number of overseas students is increased by one. From the perspective of the sending country, as each overseas student studies abroad, the extra unit of cost is the same in each case. Hence, marginal costs are equal to average costs from the view point of sending country. However, from the perspective of the host country, marginal cost of supporting one extra student from overseas may be much lower than the average cost in providing a university place, particularly if there are empty seats in classrooms - would depend upon whether the student selects high demand or low demand field.

(b) Private vs Social - Private costs represent the cost to the individual or his family. Private costs of overseas student include both direct monetary expenses for tuition, textbooks, travel costs and other maintenance items, and indirect cost of students' time measured by the foregone earnings in employment. The private costs of overseas education may be reduced through financial support in the form of grants, bursaries, scholarships or loans from both the home and host governments.

Private costs of overseas education are important to consider not only because they constitute a significant part of the real cost of overseas education, but also because they can affect the place of study. A student who is considering whether to study in the

U.K., at home, or in Taiwan will be affected by the private costs of education when choosing to study in these countries.

On the other hand, social costs represent the cost to the economy as a whole. The total cost of the resources that society devotes to overseas education includes the cost of tuition fees, cost-of-living, traveling expenses and foregone earnings of overseas students. Expenditure on scholarships or bursaries from native country should not be included in the estimate of the social costs of overseas education, since this represents a transfer payment, which transfers monetary resources from the government to the family in the home country. If it was included, there would be double counting.

The difference between private and social costs of overseas education depends on the extent to which individual students or their families are subsidized by other members of society, either by means of scholarships that cover all or part of tuition fees and living costs. Although scholarships constitute a transfer payment and therefore are not included in social costs, the level of expenditure on scholarships does help to reduce the burden of the individuals and his family.

(c) Capital vs Recurrent - Recurrent costs, as the term implies, recurs regularly and covers expenditure on goods and services that are immediate and short-lived. Thus, expenditure on consumable goods, such as materials and salaries, is classified as recurrent

expenditure.

Capital costs or expenditure includes the purchase of durable assets, such as buildings or equipment, that are expected to yield benefits over a longer period. In practice, the usual convention is to make one year the accounting period, and thus goods or services used up within one year are regarded as recurrent costs.

In the case of overseas students, the host country usually estimates the recurrent costs of providing higher education to overseas students without including the capital costs. Thus, cost-of-living, traveling expenses may be treated as recurrent costs.

(d) Direct vs Indirect - The word 'direct' is used to indicate that these costs are spent directly by students on such items as tuition fees, cost-of-living, traveling expenses. These costs are directly attributable to overseas education.

Direct costs for overseas education receive most attention from host and sending countries because the figures are fairly important. To the host country side, direct costs of overseas students would contribute to a net income in educational and related services. Such spending also affects the level of overseas fee for overseas students. To the sending country side, direct costs of

overseas education represent a substantial financial burden for the whole society. For many developing countries, the costs in terms of currency outflow are very high. The previous figures for Malaysia are instructive in this respect. Malaysia transferred abroad each year a total of A\$ 1.7 billion to meet the cost of students overseas - 50% by the government and 50% by private individuals. This compares with the total budgetary allocation for Malaysia's seven universities of A\$ 1.5 billion between 1981-1985. It therefore constitutes a significant budgetary constraint, affecting priorities in the education budget.

The indirect cost is the time of overseas students, which is measured in terms of the earnings foregone by students when they choose to enroll in overseas education rather than seek paid employment in the home country. The opportunity cost of overseas education can be measured in terms of the cost to the individual or to society as a whole. For the primary purpose of this study is to compare the costs of overseas education in different host countries, the foregone earnings of overseas student may treat as the same for all. But foregone earnings would be the same if student studied at home.

Since tertiary education is a costly enterprise, to judge the appropriateness of a particular level of public expenditure to local university education and overseas university education would be extremely important. The relevant cost concept of overseas students

from the perspective of sending country should be average cost but not marginal cost or otherwise. Also the purpose of this study is to find out the total costs involved in the education of individual overseas university student from sending country - Hong Kong as a case, hence average cost is applied. As in all cost analysis, the cost ingredients and value of all possible costs would be identified in an appropriate framework for subsequent analysis. The next chapter will attempt to assess total costs for overseas university education.

(ii) Benefit Analysis

New skills and knowledge gained as a result of overseas study is one of the key benefits. In many cases, the home country does not have the necessary facilities to train students at home, and overseas study has an obvious advantage (Altbach 1989).

Another benefit of overseas education is the overseas students' incremental output, in other words, the incremental earnings. The individual's incremental earnings represent the added social value generated by investment in his overseas education. Thus a better educated, and therefore more productive, overseas graduate will receive a higher wage than a local matriculant.

Totimeh and Harris (1984) in their article found that the

overall expected private rate of return of overseas students in Australia was 51%. As regards qualification, the first degree student had the highest rate (82%) followed by doctoral degree student (41%); and the rate for master degree student was 32%.

Hossain and Crisler (1984) attempted to evaluate the perceived economic benefits associated with an overseas degree in Bangladesh. The findings showed that the students perceived overseas degrees could improve their lifetime earnings.

Chung (1990) used samples of male university graduates from Hong Kong 1986 by-census data and found that the returned overseas graduates and local graduates earned an average of HK\$ 11,044 and HK\$ 11,067 per month respectively. This indicated that the difference of earnings between overseas and local university graduates was small and may be assumed to be the same. Another study by Wong (1990) estimated that the private rate of return of university education in 1986 was 27%. But the cost of overseas university education was probably higher than the cost of local university education, which may result in the private rate of return of overseas university education being somewhat lower than the local university education.

CHAPTER THREE

COST ANALYSIS FOR OVERSEAS EDUCATION FROM THE PERSPECTIVE OF SENDING COUNTRY

Because of the increasing financial constraints on educational investment, sending countries are not only searching for alternative ways of financing overseas education, but they are also paying closer attention to the costs of educational investment and attempting to reduce unit costs on overseas education. This chapter looks at different ways of defining, measuring, and analyzing overseas educational costs.

3.1 The Problem

What is the problem of the "costs" of overseas education from the perspective of the sending country? The first obvious problem is that the overseas students would face the high cost of studying overseas due to the sharply increased tuition fees and other essential student costs in the host country. In the area of supporting overseas students, a high proportion of overseas students were financed by their own or family help, financial support has a pivotal role in facilitating access to a particular host country. Such financial support will therefore help to attract more overseas students to study in a particular host country. Apparently, the transfer of financial

burden on which side depends on the overseas students policies of home and host countries. Second, there is the problem relating to "brain drain". The native country has invested in the student's earlier education through public money but the migrating overseas student carries with him the benefit of this investment. Then the investment has been lost from the native country and the benefits of which accrue only to the emigrants who live in another country. If the non-return rate of overseas students is high, the cost of non-returnees has to be taken into account. Brain drain is an important factor in affecting the cost calculation. Hence the cost of overseas education has to be adjusted for the problem of brain drain.

Student abroad is a special type of international migrant, particularly those who remain abroad after study. In 1984, American colleges and universities enrolled about 200,000 Asian students. It was estimated that about one-third of them would stay in the United States by marrying American citizens, obtaining immigrant visas based on skills or family relationships, or simply staying on illegally after the expiration of their student visas. This problem was particularly serious for Taiwan, where it was reported that only 13.2 percent of some 80,000 students who went to the United States from 1950 to 1983 have returned (Carino 1987 p.413).

The third issue related to the costs of overseas study is

currency outflow. For many sending countries, sharp increases of number of overseas students and the escalating costs of overseas education would imply that there is a massive outflow of funds from the sending country to cover the cost of its overseas students. Thus represents a net loss of foreign exchange from the sending country to the host country. Hence, it is important to understand and analyse the total costs of overseas students. For example, it was estimated that approximately Australian Dollar 1.7 billion flew annually out of the Malaysian economy to meet the tuition and living costs of its overseas students.

3.2 Cost Analysis of Overseas Education

Before studying the costing of overseas education, it is necessary to provide a brief discussion of the methodology of costing.

In practice, what educational costs should be measured depends on the decision context in which the cost analysis is performed. In general, four key issues on educational costs are considered : (1) the total costs required, (2) distribution of the cost burden, (3) the choice among different ways of analysis, and (4) the cost implications.

In order to answer the above questions, it is first necessary

to ascertain the cost of a program in terms of value of the resources that were used. To do this, the 'ingredients model' (Levin 1983) may be adopted here to identify all of the ingredients that are required for overseas education. Once these ingredients are specified, a value is placed on each of them. When values of all the ingredients are added, the total cost of the program is established. Subsequent analyses can divide costs according to who pays them and how the cost burden is distributed among the sponsoring agency, funding agencies, and clients.

The first step according to this approach is to identify the key ingredients of overseas education. They are as follows : (1) tuition fees, (2) living costs, (3) traveling expenses, and (4) other costs. Then the sum of all the ingredient costs is the total cost for a student studying in overseas.

The second step is to distribute these costs of overseas students to those who pay for them. That means each ingredient is paid by someone, and each stakeholder is identified.

In this study, the purpose is to consider the sharing of the cost burden among host countries, sending country and the private family. Hence the cost burden can be analyzed among three constituencies or stakeholders, (1) host country, (2) sending country

and (3) personal/family. As suggested by Levin, a worksheet will be used to list all ingredients, according to the categories set out in the previous paragraph (table 3.1). The cost of each ingredient for each constituency will then be estimated. This approach identifies the costs of monetary value for host and sending societies.

Table 3.1 Worksheet for Estimate Costs
of Overseas Education in a
Particular Year from the
Perspective of Sending Country

Cost Ingredients	Stakeholder/Constituency			
	Total Costs	Costs to Sending Country	Costs to Host Country	Costs to Private/ Family
Direct Cost				
Tuition Fees				
Living Costs				
Traveling Expenses				
Others				
Total Ingredient Cost				
Transfer Payment				
Net Cost to Various Constituencies				

All data of overseas education were collected on four main components of cost : tuition fees, living costs, traveling expenses

and miscellaneous costs; and three sources of financing : sending country, host country and personal/family. To illustrate the approach, table 3.1 presents cost and sources of financing for overseas education. The left column of the table identifies the cost components while the top row identifies the sources of financing.

3.3 Costs of Overseas Education

There are three important ingredients of overseas educational costs.

(i) Tuition Fees - First are the costs of direct monetary expenses for tuition fees, union fees or charges for laboratory use etc. These costs vary according to courses of study and different kind of sectors in host country. For example, overseas students in the United States may face extremely high tuitions, ranging as high as US\$ 12,000 for those who study in expensive private colleges (Johnstone 1990 p.12). If in the public sector university, the out-of-state tuition may be lower to US\$ 3,200 (Central Staff Office of Institutional Research 1988). For Britain, the university tuition fee for all overseas students was the same, that is, £ 4,055 for arts major, £ 5,285 for science and £ 9,695 for medicine in 1988/89 (CRAC 1990).

To estimate the average tuition fees in the situation of

United States is not easy, there are over three thousand public and private colleges and universities. And also the variations in institutional practices in dealing with specific budget items, the tuition fees may diversify in broad range. Another difficulty is the distribution of overseas students in public and private institutions varied widely from state to state. For these reasons, it is important to explore ways to simplify the situation. It may first find out the overall distribution of overseas students in public and private institutions, then determine the range of out-of-state tuition fees for public and private institutions respectively. Lastly, multiply the ratio of overseas students in public and private institutions with corresponding range of out-of-state tuition rates. The final results will be treated as the estimated range of overall tuition fees of overseas students in United States universities.

(ii) Living Costs - Second are the costs of student living, represented by the students' expenditures for room, board, and other normal living costs, plus those expenditures that are occasioned by the demands of study, as in books, laboratory equipment, and transportation between residence and university campus. These costs vary according to whether the student lives in hall of residence or self-catering flat, as well as the prevailing living standards for students. In France and Germany and all of the socialist countries, living cost can be artificially low because of government subsidies of

student meals, dormitories, and other expenses.

For individual host country, living costs also vary in different regions between urban and nonmetropolitan areas. Hence to estimate the cost-of-living expenditures of overseas students in each country is not easy. For example, overseas students in the United States may be based on the recommended Monthly Maintenance Rates for each academic year produced by IIE. The Monthly Maintenance Rates are based on Bureau of Labor Statistics estimates of intermediate-level family budgets and comparative indices on prices in selected urban areas, with adjustments to reflect inflation and special overseas student need (IIE Costs at US Educational Institutions).

Another example of the estimated living costs of overseas students in Britain was surveyed by British Council in September/October of each year. It is assumed that the expenditures of students between universities and further education institutions, urban and rural areas are the same.

While a student studies in his/her own country, the costs of room and other basic living expenses that would be incurred as the incremental cost from the family expenditure. But if study abroad, the total costs of living should not be measured as marginal costs but as total average costs. In other words, the appropriate total private-borne costs on overseas education are clearly the total amount

of tuition and cost-of-living.

(iii) Traveling Expenses - The third costs to be considered should be travel costs. The travel costs usually refer to single air ticket in economy fare to host country. These costs generally vary according to the distance between the sending country and the host country. However these costs are for new entrants only and relatively insignificant compared to other costs.

There are other costs involved in dealing with overseas education, such as administrative costs or premium for health services. Some of these costs are borne either by host country or by the institutions. The estimates of these costs to the institutions or sending country are not easily available. However these costs are relatively insignificant compared to other costs.

3.4 Cost to Each Constituency

Another key issue to consider is the cost to whom. That is to know not only the total cost of each ingredient, but who will pay for it among such constituencies as the sending country government, the host country government or the family, and so on. If we assume that the host country will be making the decision, it is likely to consider only its share of the cost burden in providing educational services rather than the overall costs in ranking alternatives. In

contrast, the overseas students that fully cover the costs will be most concerned about the costs to them. Indeed, both costs and effects should be viewed from the perspective of different constituencies that have a stake in the outcome. For this reason, we must estimate not only the total ingredients cost of overseas education, but also the cost to each constituency or 'stakeholder' (Levin 1983).

Allocation of overseas education costs among different constituencies may be classified under three main headings.

(i) Host Country - From the perspective of host country, the costs of public funded university education are mainly financed by tuition fees paid by individual students and by government subvention to institutions. These are the costs that would appear in an institution's operating budget.

In the case of Britain, the government subventions channeled through the University Grants Committee, the Department of Education and Science and Local Authorities. Before 'full-cost' fees were introduced, the British government's opinion was that tuition fees paid by overseas students were less than the total cost of their education and the difference between the fees and the full costs represented the subsidy. British government estimated the amount of

subsidy for 1979/80 to be £ 110.6 million calculated at November 1979 prices. The figure was about £ 160 million in 1981/82 and £ 170-175 million in 1982/83 (Overseas Students Trust 1982 para. 3.11-16).

The Australian Commonwealth Tertiary Education Commission estimated that the recurrent cost of providing higher education to overseas students in 1982 was about A\$ 90 million. If account was also taken of the demand which overseas students make on other resources, including equipment and capital costs, the national costs to institutions of overseas student participation in Australian higher education would exceed A\$ 100 million a year (Commonwealth Tertiary Education Commission Report for 1982-84 Triennium vol. 4 Appendix 10).

Another form of host government expenditure on overseas students is via government awards schemes. The different awards schemes cover very different items of expenditure. Some, like the British Overseas Research Students Awards Scheme, cover only the tuition fees. Others are British Council Scholarships and Fellowships Schemes covering the whole of the tuition fee, cost-of-living, certain allowances (for warm clothing, local travel, etc.) and travel to the U.K. Approximate sums expended under different schemes in 1982/83 totalled to some £ 48 million (Overseas Student Trust 1982 para. 3.19-21).

In Canada, academic awards for overseas students are available from Canadian government sources. The federal government offers several scholarship programs, including the Government of Canada Awards, Commonwealth scholarships and other awards offered through Canadian International Development Agency (CIDA) and the International Development Research Centre (IDRC). In addition, several provinces maintain scholarship programs (Holroyde 1986). In the year 1985/86, near CN\$ 6 million of Canadian and Commonwealth scholarship were allocated to overseas students in Canada.

Table 3.3 Canadian and Commonwealth Scholarship
(CN\$ million)

Year	1981/82	1982/83	1983/84	1984/85	1985/86
Scholarship Programs	3.84	4.20	4.09	4.40	5.96

Source : Statistics Canada 1987 Canada Yearbook 1988 Table 21.14

The other source of financial support for overseas students from host country by university funding or foundations. For example, in US, large amounts of money have been spent by Asia Foundation, Ford Foundation, Luce Foundation, and others to support overseas students in US universities. In the year of 1985, the financial support for Chinese students in US by university and foundation were US\$ 76.4

million and US\$ 3.2 million respectively (Orleans 1988 Table 5-4). Another example of financial support is from UK/HK scholarships committee that offers scholarships to Hong Kong students who study in the United Kingdom. The value of awards would cover tuition fees, living costs and travel costs for the entire duration of the course of study. In each year, about £ 25 thousand is spent on the provision of scholarships to overseas students from Hong Kong (Hong Kong 1990, UK/HK Scholarships Committee Information Note 1988).

In most host countries, overseas students are not allowed to take up any employment. The host governments usually require students from other country to have sufficient financial resources to cover tuition and maintenance costs. Hence, in principle, overseas students are not allowed to work in part time in host country to finance their studies.

(ii) Sending Country - For many sending countries, sending students abroad for degrees and research opportunities is a part of nation's policy to upgrade the educational system and provide the nation with the professional manpower necessary to meet the goals of industrialization and modernization. Hence the sending country government would offer official sponsorship for students to study abroad. For example, the amount of funding from the Chinese government to support Chinese students in U.S. universities increased

from US\$ 7.7 million in 1980 to US\$ 22.3 million in 1985 (Orleans 1988 Table 5-4).

In Australia, Malaysia transferred abroad each year a total of A\$ 1.7 billion to meet the cost of students overseas. About half of this was spent by the Government sponsoring Malaysian students overseas and the rest by private individuals (Smart 1988).

Apart from the official governmental support, various organizations, firms, professional associations and individuals would also donate funds in offering bursaries and scholarships to overseas students to study abroad. Normally, the award of scholarships and bursaries are based on academic merits.

In the case of Hong Kong, Sir Edward Youde Memorial Fund Council finances outstanding Hong Kong students for overseas study. The value of the award may cover tuition fees, cost-of-living and traveling expenses. During the period 1987/88 to 1989/90, scholarships totalling HK\$ 6.8 million were paid to Hong Kong students for overseas study (Hong Kong 1988, 1989, 1990).

(iii) Personal/family - The third sources are from the students or parents, through depletion of savings, loans or other sources to cover the costs of student living and tuition.

In the area of supporting overseas students by personal/family source, the picture appears to have changed in the direction of a higher proportion of self-financed overseas students since 1970. In the case of the United States, it is revealed that two-third of overseas students were financed by their own or family resources in 1975/76 and the proportion of overseas students increased steadily to 72% in 1985/86 (IIE 1975/76 and 1985/86).

In some cases, subsidy to the costs of overseas students are shared between host and sending countries. Both countries make contributions to cover the costs of studying overseas through direct grants, scholarships or fellowships to the institution or to the student. This category of cost would be distributed back to the host country and sending country respectively.

To take an example, in 1983, a grant scheme funded by equal contributions from the Hong Kong and United Kingdom Governments to subsidize Hong Kong students on first degree or Higher National Diploma Courses in the UK was established. This grant helps Hong Kong students in UK to meet the difference in tuition fees between home and overseas students. The maximum commitment accepted by the two governments was £ 3.8million for the first two years of operation, rising to £ 4 million for 1985/86 (UPGC Secretariat 1986).

CHAPTER FOUR

ANALYZING COST OF HONG KONG OVERSEAS STUDENTS

The general overview of the Hong Kong overseas student population shown in table 1.2 depicts the enormous increase in the overseas student numbers during the 15-year period 1970-1985, which rose by more than 1.7 times. In the same period, the costs in supporting an overseas student increased every year. Particularly, the policy of full-cost/non-subsidized tuition fees for overseas students influenced the final destination of overseas study. This chapter describes the cost of Hong Kong overseas university education, including costs of tuition, costs-of-living, costs of traveling and miscellaneous costs, in the United Kingdom, Canada, Australia, United States and Taiwan. Attention will be paid to the apportioning of the cost burden among host country, home country and personal/family.

4.1 Britain

The enrollments of Hong Kong students continued to increase even in the year 1980- the introduction of "full-cost" policy. There may be two reasons for the phenomenon : the demand for university education in Hong Kong was high, and there was special financial arrangement by the British Government and Hong Kong Government to subsidize the fees.

From the distribution pattern of Hong Kong students (see table A3 in Appendix A), most Hong Kong students were in engineering

and technology, in social, administrative and business studies, and in science. These three subject areas always constituted over 70% of all students. The total percentage of student population was much lower in agriculture, forestry and veterinary science, languages and literature, and education.

It is interesting that, the percentage share of students in education increases rapidly from 6.3% in 1980/81 to 23% in 1984/85. Probably, a degree in education has a ready market value for the Hong Kong students. Kinnell (1988 pp 129-130) pointed out that individual universities had developed their own links with specific country : for example, Nottingham's School of Education with Hong Kong.

The overall pattern of Hong Kong students certainly confirms the point made by Oxenham (1981) in respect of the developing countries that students go to Britain mainly to pursue development-oriented applied studies rather than arts and pure science.

Table 4.1 Unit Costs of a Hong Kong Student
in British University, Selected Years (£)

	1976	1981	1986
Tuition Fees (1)	320	2,857*	4,005*
Living Costs (2)	1,500	2,900	4,075
Traveling Expenses (3)	1,977	5,916	8,324

* The weighted average overseas tuition fees of Hong Kong student in British University.

Sources : (1) Appendix A Table A2 and A5

(2) Careers Research and Advisory Centre Graduate Studies various editions

(3) Appendix F Table F1

Table 4.1 shows the unit costs of a Hong Kong student in British university across three different academic years, 1975/76, 1980/81 and 1985/86. Between 1975/76 and 1985/86, total unit cost rose by more than 4 times, but the dramatic growth of 12.5 times was in the tuition fees reflecting the importance of tuition.

To determine the unit costs of Hong Kong student in Britain, the methodology of cost ingredient approach developed previously is adapted to analyze costs of university overseas education. All of the cost data may be found in Appendix A.

Table 4.2 Worksheet for Estimate the Unit Costs
of Hong Kong Students in British University
1976 (£)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to U.K. Government	Costs to Personal/Family

Direct Cost				
Tuition Fees	320			320
Living Costs	1,500			1,500
Traveling Expenses	157			157
Total Ingredient Costs	1,977			1,977

Net Costs to Various Constituencies	1,977			1,977

*The costs to Hong Kong and U.K. governments were extremely small relative to the total costs from the available sources.

Table 4.3 Worksheet for Estimate the Unit Costs
of Hong Kong Students in British University
1981 (£)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to U.K. Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	2,857			2,857
Living Costs	2,900			2,900
Traveling Expenses	159			159
Total Ingredient Costs	5,916			5,916

Net Costs to Various Constituencies	5,916			5,916

* The costs to Hong Kong and U.K. governments were relatively small to the total costs from the available sources.

Table 4.4 Worksheet for Estimate the Unit Costs
of Hong Kong Students in British University
1986 (£)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to U.K. Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	4,005	342.5	342.5	3,320
Living Costs	4,075			4,075
Traveling Expenses	244			244
Total Ingredient Costs	8,324	342.5	342.5	7,639

Net Costs to Various Constituencies	8,324	342.5	342.5	7,639

The sum of all input costs appears as the 'total ingredient costs' in column 1 of Tables 4.2, 4.3 and 4.4. In 1976, the total

costs of a Hong Kong student in Britain was £ 1,977, £ 5,916 in 1981 and £ 8,324 in 1986. For the year 1976 and 1981, the personal/family almost bore the full cost burden. But in 1986 (table 4.4), the costs to the personal/family was only £ 7,639, or 92% of estimated total costs. The Hong Kong and UK Governments provide financial support to Hong Kong students by equal share of the remaining 8% costs.

4.2 Canada

At the university level, the number of Hong Kong students continued to grow from 3,761 (1975/76) to 7,661 (1985/86). Since late 1970s and early 1980s, differential fees have been charged to overseas students. The enrollments in universities experienced a decline in 1980 over the previous four years. Between 1981/82 to 1984/85, a sizable number of Hong Kong students increased from 6,887 to 9,168.

From the distribution pattern of Hong Kong students in Canadian provinces, the enrollment fell from 57% (1975/76) to 41% (1985/86) in Ontario and Quebec with differential fees. On the other regions without differential fees, the percentage of Hong Kong rose from 12% and 22% to 26% and 27% respectively (Appendix B table B2). Although the decline in enrollment may not be due solely to rising costs, there is evidence that such costs are a contributing factor.

Turning to analysis of costs of Hong Kong students in Canada, the ingredient approach is applied. The essence of this approach is to identify all of the input costs associated with overseas education

in Canada and to account for the costs of those inputs. We also to allocate the costs among the different sources of funding. All of the data were fed into cost worksheets based on Appendix B.

Table 4.5 Worksheet for Estimate the Unit Costs
of Hong Kong Students in Canadian
University 1976 (CN\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Canada Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	683			683
Living Costs	3,023			3,023
Traveling Expenses	388			388
Total Ingredient Costs	4,094			4,094

Net Costs to Various Constituencies	4,094			4,094

*The reason for all costs attributable to personal/family may be referred to 5.1 in chapter 5.

Table 4.6 Worksheet for Estimate the Unit Costs
of Hong Kong Students in Canadian
University 1983 (CN\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Canada Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	2,315			2,315
Living Costs	5,323			5,323
Traveling Expenses	407			407
Total Ingredient Costs	8,045			8,045

Net Costs to Various Constituencies	8,045			8,045

Table 4.7 Worksheet for Estimate the Unit Costs
of Hong Kong Students in Canadian
University 1986 (CN\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Canada Government	Costs to Personal/ Family
Direct Cost				
Tuition Fees	4,577			4,577
Living Costs	12,750			12,750
Traveling Expenses	594			594
Total Ingredient Costs	17,921			17,921
Net Costs to Various Constituencies	17,921			17,921

The above three tables summarize components costs and total ingredient costs of Hong Kong students in Canada. From 1976 to 1986, the total ingredient costs increase from CN\$4,094 to CN\$17,921. Amongst these costs, tuition fees yield the largest increase to more than 6.7 times, then the living costs with slightly over 4.2 times.

As data shows, living costs comprise from 66% to 73% of total ingredient costs in the ten years period. This percentage component cost breakdown by items demonstrates the importance of living costs in the cost structure of overseas education.

4.3 Australia

In 1985, there were approximately 1,700 Hong Kong private students studying at the Australian tertiary level. This number has increased steadily over the years (see table C1 in Appendix C).

In order to estimate the unit cost of Hong Kong students in Australian university, the following cost worksheets enable us to analyze costs in ingredients approach. All of the cost data may be referred to Appendix C.

Table 4.8 Worksheet for Estimate the Unit Costs
of Hong Kong Students in Australian
University 1976 (A\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Australian Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	0			0
Living Costs	2,840			2,840
Traveling Expenses	316			316
Total Ingredient Costs	3,156			3,156

Net Costs to Various Constituencies	3,156			3,156

*The reason for all costs attributable to personal/family may be referred to 5.1 in chapter 5.

Table 4.9 Worksheet for Estimate the Unit Costs
of Hong Kong Students in Australian
University 1981 (A\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Australian Government	Costs to Personal/ Family

Direct Cost				
Tuition Fees	2,404			2,404
Living Costs	5,215			5,215
Traveling Expenses	338			338
Total Ingredient Costs	7,957			7,957

Net Costs to Various Constituencies	7,957			7,957

Table 4.10

Worksheet for Estimate the Unit Costs
of Hong Kong Students in Australian
University 1986 (A\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Australian Government	Costs to Personal/ Family
Direct Cost				
Tuition Fees	3,042			3,042
Living Costs	6,000			6,000
Traveling Expenses	524			524
Total Ingredient Costs	9,566			9,566
Net Costs to Various Constituencies	9,566			9,566

In 1976, the major cost of overseas education was living costs in which comprising 90% of the total costs. From 1980, the Australian Government announced to charge the overseas students with tuition fees to cover the full costs of a university place. Then the total costs increased rapidly to about 2.4 times in a five-year period. Since then, the tuition fees accounted for about slightly over 30% of total costs while living costs comprised almost two-third of total costs.

4.4 America

In 70s, United States was the most popular country of Hong Kong students studying abroad. It received more than half (52%) of the Hong Kong overseas student population in 1970. In recent years, a shift in the pattern of flows was from U.S. to Commonwealth countries. Although US still remained the leading place of host country in

1985/86, its share of Hong Kong overseas students dropped to less than one-third (31%).

In the area of financing, the trend appears to have changed since mid-70s, mainly in the direction of a higher proportion of self-financed overseas students. This seems quite clearly that the percentage share of primary sources of finance by personal/family resources increased from 67% in 1975/76 to 72% in 1985/86. The next largest primary sources of support were the US government and university (17 percent in 1985/86) (see table D4 in Appendix D).

Once again, tables 4.11, 4.12 and 4.13 show three unit cost worksheets of Hong Kong students in US university in the years 1975/76, 1980/81 and 1985/86. Three worksheets enable us to ascertain who is paying the costs for each alternative. The source of the cost data may be found in Appendix D.

Table 4.11 Worksheet for Estimate the Unit Costs
of Hong Kong Students in US
University 1976 (US\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Country	Costs to US Country	Costs to Personal/Family
Direct Cost				
Tuition Fees	1,300	130	299	871
Living Costs	5,400	540	1,242	3,618
Traveling Expenses	382			382
Total Ingredient Costs	7,082	670	1,541	4,871
Net Costs to Various Constituencies	7,082	670	1,541	4,871

Table 4.12 Worksheet for Estimate the Unit Costs
of Hong Kong Students in US
University 1981 (US\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Country	Costs to US Country	Costs to Personal/ Family
Direct Cost				
Tuition Fees	1,500	150	255	1,050
Living Costs	6,420	835	1,091	4,494
Traveling Expenses	385			385
Total Ingredient Costs	8,305	985	1,346	5,929
Net Costs to Various Constituencies	8,305	985	1,346	5,929

Table 4.13 Worksheet for Estimate the Unit Costs
of Hong Kong Students in US
University 1986 (US\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to US Government	Costs to Personal/ Family
Direct Cost				
Tuition Fees	3,200	320	544	2,304
Living Costs	7,692	846	1,308	5,538
Traveling Expenses	336			336
Total Ingredient Costs	11,228	1,166	1,852	8,178
Net Costs to Various Constituencies	11,228	1,166	1,852	8,178

Studying abroad in US in 1976 would cost US\$7,082 a year and went up to US\$11,228 in 1986. In 1976, the percentage share of tuition fees was 18.4%, then by 1986 it had increased to 28.5%. Expenditure on traveling changed little overall, and living costs fell by 7.8% between 1976 and 1986.

In 1976, 23% of the Hong Kong students received some form of financial assistance from US country of an average US\$1,541, and about one-tenth received from Hong Kong sponsor averaging US\$670. During the 1985/86 academic year, seventeen percent of all Hong Kong students were supported by US country and about eleven percent by Hong Kong sources, such as scholarships and sponsorships.

4.5 Taiwan

Hong Kong students were concentrated in the universities and colleges, the proportion of these students population rose steadily from 1,824 (77.7%) in 1975/76 to 3,480 (88.3%) in 1985/86. In fact, a large number of those who left Hong Kong to Taiwan, nearly half of the students entered to prestigious universities as National Taiwan University and National Taiwan College of Education in 1981/82 (National Taiwan University Bulletin 1982/83, National Taiwan College of Education Bulletin 1982/83). The possibility of Hong Kong students in getting admissions to university was higher in Taiwan than in Hong Kong. One out of three Hong Kong candidates may successfully get admitted to a degree course in Taiwan university.

The Overseas Chinese Commission provides subsidy to the insurance premium for health services of overseas Chinese students. One-third of the premium is subsidized by the commission, the premium for a student was NT\$2,100 in 1975/76, NT\$2,100 in 1980/81 and NT\$2,550 in 1985/86 (Annual Report of The Republic of China 1975/76,

1980/81 and 1985/86). Furthermore, the Commission's support of cost-of-living is in the form of assistantship. Individuals may receive the monthly subsidy NT\$500 in 1975/76, NT\$1,000 in 1980/81 and NT\$1,500 in 1985/86.

According to the data from appendix E, all of the ingredient costs can be allocated to different constituencies in different years by using the ingredient cost worksheet. The results of the worksheet are listed below in Tables 4.14, 4.15 and 4.16, showing the years of 1976, 1981 and 1986 respectively.

Table 4.14 Worksheet for Estimate the Unit Costs of Hong Kong Students in Taiwan University 1976 (HK\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Taiwan Government	Costs to Personal/Family
Direct Cost				
Tuition Fees	5,700			5,700
Living Costs	1,500			1,500
Traveling Expenses	500			500
Premium for Health Services	280		93	187
Total Ingredient Costs	7,980			7,887
Cost-of-living Subsidy				
			+800	-800
Net Costs to Various Constituencies	7,980		893	7,087

Table 4.15

Worksheet for Estimate the Unit Costs
of Hong Kong Students in Taiwan
University 1981 (HK\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Taiwan Government	Costs to Personal/ Family
Direct Cost				
Tuition Fees	5,400			5,400
Living Costs	3,500			3,500
Traveling Expenses	680			680
Premium for Health Services	290		97	193
Total Ingredient Costs	9,870			9,773
Cost-of-living Subsidy			+1,650	-1,650
Net Costs to Various Constituencies	9,870		1,747	8,123

Table 4.16

Worksheet for Estimate the Unit Costs
of Hong Kong Students in Taiwan
University 1986 (HK\$)

Cost Ingredients	Total Costs	Costs to Hong Kong Government	Costs to Taiwan Government	Costs to Personal/ Family
Direct Cost				
Tuition Fees	10,600			10,600
Living Costs	6,000			6,000
Traveling Expenses	800			800
Premium for Health Services	480		160	320
Total Ingredient Costs	17,880			17,480
Cost-of-living Subsidy			+3,400	-3,400
Net Costs to Various Constituencies	17,880		3,560	14,080

These data show that, in the case of a Hong Kong student, the Taiwan government contributed more than in any of the other countries surveyed except the U.S.A. In 1975/76, 11% of total costs was supported by the Taiwan government. The cost of subsidy rose by 10% during the year 1985/86.

This chapter looks more closely at unit cost of overseas university education in individual host country. And also the contributions of different sources of finance in each input category are listed in tables. In the next chapter, an attempt to compare different countries' system of overseas student support and the costs to the individual student.

CHAPTER FIVE
RESULTS AND CONCLUSIONS

5.1 Possible Bias of the Result

Before summarizing the data, some limitations of the above analysis may be raised. There may be some possible biases in the estimates.

(1) Only scholarship or direct subsidy from the host country are considered as costs towards the host country. For Australia, the average overseas tuition charge is equivalent to cover 35% of full costs in 1986. For Britain, the overseas student charge may cover the 'full-cost' of an university place. But for other host countries, it is not known to what extent in the overseas tuition fees cover the actual unit cost of an university place. Hence there may be a downward bias of the costs to host country and may underestimate the total costs. On the other hand, the extra cost for each additional overseas student may be seen as the marginal cost that the proportion of overseas students only shares a little portion of the total university enrollment. There is evidence for believing that the marginal cost is lower than the average cost per student for an university place (Mace 1987). This indicates that the cost figure to the host country should be adjusted down. This may vary according to the demand for particular courses.

(2) In calculation of costs to Canadian and Australian governments, a little portion of Hong Kong students was financially supported by two host governments or universities. From the available sources, the proportion has remained extremely small relative to the

total costs. For instance, in 1986 there were 13 students sponsored with Canadian Official Development Assistant (Statistics Canada 1987 table 2). In 1981, there were 5 students sponsored by Common Cooperation in Education in Australia (Australia Year Book 1981 p.78).

(3) The estimated overall tuition fees for U.S.A. and Canada may be underestimated. For U.S.A., it is based on the state university tuition fees and for Canada it is based on the simplified fee structure.

(4) Since living costs varied in different regions of the hosted countries and between urban and nonmetropolitan areas, it is only possible to estimate a rough approximation of the living costs of overseas students in different host countries for selected years.

(5) Data for the distribution pattern of field of study of Hong Kong students is not necessarily available, it is only possible to assume similar to the overall pattern. Hence it is liable to a considerable margin of error in estimation of weighted average tuition fees.

5.2 Summarizing the Data

Using the cost data from the previous chapter, the 1976, 1981 and 1986 cost ingredients are summarized in tables 5.1 and 5.2.

Total costs of overseas students have increased dramatically since 1976 in most of the host countries (Table 5.1). In Canada, the increase of total costs was almost 5 times between 1976 and 1986. Over the same period total costs in United Kingdom increased by 4.6

Table 3.1 Annual Unit Cost and Cost Ingredients as Percentage of the
Total Costs of Hong Kong Overseas Students in Five Host Countries
1976, 1981 and 1986

Cost Ingredients	UK		Canada		Australia		USA		Taiwan		
	HK\$	%	HK\$	%	HK\$	%	HK\$	%	HK\$	%	
Tuition Fees	1976	3,267	16.2	3,388	16.7	0	0	6,546	18.4	5,700	71.4
	1981	35,055	48.3	10,000*	28.5	14,568	30.2	7,694	18.0	5,400	54.7
	1986	45,136	48.2	25,631	25.5	16,244	31.8	24,995	28.5	10,600	59.3
Living Costs	1976	15,315	75.9	14,994	73.8	17,949	90.0	27,189	76.3	1,500	18.8
	1981	35,583	49.0	22,993*	65.5	31,603	65.5	32,935	77.1	3,500	35.5
	1986	45,925	49.0	71,400	71.1	32,040	62.7	60,082	68.5	6,000	33.6
Traveling Expenses	1976	1,600	7.9	1,925	9.5	2,000	10.0	1,925	5.3	500	6.3
	1981	1,950	2.7	2,125*	6.1	2,050	4.3	2,100	4.9	680	6.9
	1986	2,650	2.8	3,325	3.3	2,800	5.5	2,625	3.0	800	4.5
Others Costs	1976	-	-	-	-	-	-	-	-	280	3.5
	1981	-	-	-	-	-	-	-	-	290	2.9
	1986	-	-	-	-	-	-	-	-	480	2.6
Total Ingredient Cost	1976	20,182		20,307		19,949		35,660		7,980	
	1981	72,588		35,120*		48,221		42,730		9,870	
	1986	93,711		100,356		51,084		87,752		17,880	

*Figures are in the year 1983/84

Note : To convert the foreign currencies into Hong Kong dollars for comparison, the exchange rate is based on table F2 in Appendix F.

Sources : Tables 4.2 to 4.16

Table 5.2 Distribution Pattern of Financing of Hong Kong
Overseas Education (% of total costs)
1976, 1981 and 1986

Sources of Financing		UK	Canada	Australia	USA	Taiwan
Personal/Family	1976	100	100	100	67	89
	1981	100	100*	100	70	83
	1986	92	100	100	72	79
Home Country (HK)	1976	0	0*	0	10	0
	1981	0	0	0	13	0
	1986	4	0	0	11	0
Host Country	1976	0	0	0	23	11
	1981	0	0*	0	17	17
	1986	4	0	0	17	21

*Figures are in the year 1983/84

Sources : Tables 4.2 to 4.16

times, and in Australia by 2.6 times. Similarly, the students in U.S.A. experienced a 2.5 times increase between 1976 and 1986. In Taiwan, total costs rose more than doubling from the same period. However, the introduction of full-cost tuition in the end of 1970s resulted in a rapid increase of total costs in the United Kingdom, Canada and Australia.

Turning to cost ingredients, as table 5.1 reveals, there is a wide variation in tuition fees. Due to the British full-cost national policy, fees for university course in 1986 was HK\$45,136 which is much higher than that in the other countries. Canada and America have no comprehensive national policy on overseas students, their fees policies are provincial or institutional, rather than a Federal Government responsibility. Hence the annual tuition fees of overseas students has a moderate increase and fall in a narrow range between HK\$24,995 and HK\$25,631 in the year 1986. For Australia, the average overseas student tuition fees was HK\$16,244 which is equivalent to cover 35% of full costs in 1986. In Taiwan, the cost of subsidizing overseas Chinese students is borne by the government and hence the tuition fees are relatively lower than those in other host countries.

The costs of living of university education to overseas students in Canada and United States are considerable, owing to high living costs generally and to the special overseas student needs. As seen in table 5.1, estimated average costs in 1986 ranged from HK\$60,082 (U.S.A.) to HK\$71,400 (Canada) for those residing at these two countries.

The allocation of overseas student maintenance costs in the United Kingdom is about half of the total costs in overseas education in the period 1981 to 1986. The actual costs-of-living incurred by overseas students are HK\$35,583 in 1981 and HK\$45,925 in 1986.

The living costs of overseas student in Australia and Taiwan were relatively low. In 1986, living costs in Australia and Taiwan were 45% and 8% of in Canada respectively. Taiwan's overseas students face a lower schedule of student living costs, largely because of the relatively low standard of living costs as compared to those Western countries.

As table 5.1 shows, traveling expenses account for a small percentage of the total costs. The percentage share is decreasing between the ten year period, from the highest 9.5% in 1975/76 to less than 3% in 1985/86.

Other cost includes such item as insurance payment to cover the costs of health services of overseas students in host country. However, this cost is relatively insignificant compared to other costs.

Finally, turning to sources of financing, table 5.2 shows the relative contributions of the three sources of finance. Overseas students and their parents bear from 67% to 100% of the total costs of the overseas education depending on which host country. The

percentage share of overseas student contributions, among the five countries, Canada and Australia are the highest. And the highest total cost was in Canada. In Britain, the Government launched a funding scheme in 1983/84 to help Hong Kong students with full-cost fees, then the cost burden of family has been reduced to 92% of total costs in 1986. For overseas students in the United States and Taiwan, the large host contribution is clearly very important in reducing the family burden and it may have borne a necessary inducement for the attraction of overseas students. The contribution of these two countries has been supported by several sources, including by universities, private sponsors and government.

On the other hand, since 1980, when the British full-cost fees and Australian overseas student charge were introduced, the number of Hong Kong students still increased. This may be explained by the effect of the financial support from Hong Kong and U.K. governments and the slight increase of tuition fees in Australia.

The sending country - Hong Kong government in this case contributed only a small proportion of a large overseas education cost. The relative share of overseas students cost with U.K. government was about 8% of total costs in 1986. For the United States, the majority of funding sources from Hong Kong should be apportioned among the private sponsors, philanthropists and other non-government organizations.

5.3 Conclusions and Discussions

There are six major conclusions in this study :

(1) For all five host countries, the total costs are increasing over time.

(2) For all host countries except Taiwan, the percentage share of tuition fees is increasing and the proportion of living costs also appears the highest over time.

(3) In Taiwan, the total costs are always much lower than the others. Also the Taiwan government shares ten to twenty percent of total costs of overseas education.

(4) The support of overseas students by US country has included several sources : universities, private sponsors, and government. In contrast, the dominating supporter of overseas students in U.K., Australia, Canada and Taiwan is the central government.

(5) The Hong Kong government only contributed a small portion of funding in financing Hong Kong students in U.K. and very little in other countries.

(6) Approximately from two-thirds to one hundred percent of the overseas students used personal/family funds as their primary source of funding.

It is indubitable that the changes in tuition fees to

overseas education must come from the changes in the policy of host country. This change is mainly due to the host government's subsidization policy on overseas education. In most countries, the policy usually emphasizes that the overseas students should not be subsidized out of resources allocated for home students and the restriction of rapid expansion in enrollments. However, these two problems are closely related. There is clearly a connection between host government policy and trends in enrollment. High tuition fees are undoubtedly the main reason for the drop in demand, just as the subsequent increase in scholarship provision and decrease in the growth rate of tuition fees have had some positive influence on enrollment. Thus, there is a clear implication of high tuition fees of overseas student policy that is used to regulate overseas student numbers.

In addition, it is revealed from the cost structure that the living cost is usually higher than tuition fees. Then a second issue in overseas education financing is in meeting the living costs of overseas student. Thirdly, the financing system of overseas students should also open up opportunities for private sector, philanthropy and alumni support.

From the above points, the host country's policy of financing overseas student should consider the following areas :

(1) Since 1980s, a major change in fees policy towards overseas students is moving from general subsidy towards more targeted

support and at less expense. So far, public funding is necessarily at the heart of public policy on overseas students. But when the policy is heavily weighted towards the volume of public money and with neglect of diplomatic, trade and educational targets, the result is a very lop-sided and imbalance policy. Conclusively, the policy of overseas students should be a comprehensive and effective one and in consideration of short-term and long-term, economic, diplomatic and educational targets.

(2) It is important both to seek other sources of funds and to spread the cost of overseas student support as widely as possible. In fact, for example, there exists a commercial element in the overseas student/host country relationship. The multi-national companies in general agree that overseas students have a positive effect upon their business. Hence they would like to contribute to the funding of the education and training of overseas students in appropriate disciplines such as science, advanced engineering, information technology, computing, business management, economics.

(3) The choice of who should receive support, and what the size of individual needs to be, should vary from course to course and year by year, according to the current circumstances of host country. Also it is well placed to assess the extent of individual student's financial needs. The amount of support needed will vary : one student may require only a partial subsidy - tuition fees only; the other, full support covering tuition fees, travel and cost-of-living. The use of funds should be flexible and efficient in meeting these needs.

However, for host country, the policy of financing overseas student should also concern with the needs of developing countries and to provide equal access (for overseas and home students) to the most advanced knowledge.

To the sending country, the overall cost of overseas study may see as a kind of foreign loss. Furthermore, if the cost of non-returning students is taken into account, the unit cost will be much higher depending on the rate of returnee. It is not deal with such adjustment here because of lack of information on 'brain drain' or rate of returnee of Hong Kong students due to overseas study.

Besides, from the perspective of sending country or the personal/family, what is most important is the direct costs that they are facing.

Table 5.3 summarizes the unit cost of university education in Hong Kong and other five countries. From the table, one can see that the unit cost of Hong Kong very close to U.K., Canada and Australia in 1976. In 1981, the unit cost of Hong Kong is higher than those in Canada and Taiwan, and very close to that in U.S.A. In 1986, the unit cost of Hong Kong is still higher than those in Taiwan and Australia. For other cases, the unit costs are much higher than that in Hong Kong.

Table 5.3 Annual Unit Cost of University Students in Hong Kong and Five Countries (HK\$)

	1976	1981	1986
Hong Kong	20,682	39,456	69,811
UK	20,182	72,588	93,711
Canada	20,307	35,120*	100,356
Australia	19,949	48,221	51,084
USA	35,660	42,730	87,752
Taiwan	7,980	9,870	17,880

*Figure is in the year 1983/84

- Sources : (1) Table 5.1
 (2) F.S. Hung (1982). 'Private and Social Rates of Return on Investment in Education in Hong Kong'. Unpublished M.A. thesis, School of Education, The Chinese University of Hong Kong.
 (3) K.F. Wong (1990). Private and Social Rates of Return to Education in Hong Kong Table 14.

However, while interpreting these results, it is recognized that the unit cost of Hong Kong university education is much underestimated. As Wong (1990) pointed out that the direct social cost of Hong Kong university did not reflect the total opportunity cost foregone of running the university since the costs of capital and land services were not included. Thus the resulting effect is obvious : government has made heavy subsidization on university education and reduce the unit cost. On the other hand, if the cost of non-returning students is taken into consideration, the unit cost in host countries will be higher than the estimated value depending on the rate of returnee.

Between the period from 1976 to 1986, the economy of Hong Kong has grown very rapidly. At the same time, the employment structure of the Hong Kong economy has also changed rapidly. The

trend towards the demand for high-skilled manpower increases as the economy develops. On the other hand, the supply of high-skilled manpower lags behind (Chung 1989). In Hong Kong it has long been plagued by a shortage of higher education opportunities, particularly in university education. As a result, the number of university places does not match the needs of the expanding economy. Thus the government might face substantially increased demand for student places in university. In expanding the number of university places, it would require to allocate more resources. As we all know, the costs of university expansion are very high. Hence the government should search ways to minimize costs. One way of minimizing these costs may consider the marginal economic costs of overseas study - the increased cost of sending a student overseas over educating the student at home. For instance, to send a student to Canada and Taiwan in 1981 and to Australia and Taiwan in 1986, the annual unit cost is lower than in Hong Kong. Further, if government subsidization on university education is taken into account, the annual unit cost of local university place may be much higher. Moreover, the education policymaker should also justify the cost of adding a new place in terms of long-term demand or it would be more efficient to send students abroad in a field for which there is limited demand at home.

Another way of minimizing the costs is to establish more 'split site' courses in local linking with foreign universities which involve shorter periods of study abroad (Woodhall 1987b). This may help the home country to gain benefits from educational exchange, and minimize costs.

In the issue of financing overseas students by home country, the provision of financial sponsorship may help to reduce the rate of non-returnee (Myers 1972). Another important determinant of the decision of returning home is closely related to employment and career opportunities in home country. Hence the efforts of home country to attract the returning of students from abroad by government scholarships and provision of employment is the ways to reduce the increase of unit cost.

Finally, decision making of overseas study by individual student is mainly due to two reasons. The first one is a matter of the opportunity for university education. In the case of Hong Kong, the development of university education was kept under strict control by government. Up to 1986, the proportion of the 17-20 year old age group who study at the first-degree level was only 4.8% (see Appendix G). However, the number of university places neither matches the needs of the expanding economy nor the aspirations of the parents. Consequently, the flow of Hong Kong student across international borders has been increasing rapidly over the past three decades. The second reason may be that overseas education is a form of investment in human capital. This means that if investment in human capital through overseas education can bring in a high rate of return, study abroad is a worthwhile investment. As mentioned in chapter two, the earnings between returned overseas graduates and local graduates in Hong Kong are about the same. In other words, investment in overseas education seems to be profitable and viable.

Appendix A

Hong Kong Students in Britain

Traditionally, Britain was a popular destination of Hong Kong overseas students. Scholarships were provided by Hong Kong Government and British Council to encourage Hong Kong students studying there. The award of such scholarships was first made in 1946 (HK Annual Report of the Director of Education 1948/49 para. 257-258). The number of first degree university students has risen from 692 in 1975/76 to 3,580 in 1985/86 (see table A1).

Table A1 Hong Kong 1st Degree Students
in British University, 1975/76 to 1985/86

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Enrolment	692	898	1,067	1,219	1,569	1,868
New Entrant	413	480	555	742	986	1,043

	1981/82	1982/83	1983/84	1984/85	1985/86
Enrolment	2,135	3,032	3,566	3,387	3,580
New Entrant	1,165	1,192	1,262	1,142	1,252

Sources : (1) University Grant Committee University Statistics Vol.1 Students and Staff, Various editions.
 (2) The British Council Statistics of Overseas Students in Britain, Various editions.

The university tuition fee at recommended minimum levels for non-subsidized students increased from £ 320 in 1975/76 to £ 3,310 for arts students, £ 4,350 for science and £ 8,050 for medicine in 1985/86.

Table A2 Overseas Student Fees in
British University, 1975/76 to 1985/86
(£)

Year	1975/76	1976/77	1977/78	1978/79	1979/80
Overseas Fees	320	416	650	705	940

Year	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Overseas Fees	Art 2,000	2,500	2,700	2,900	3,150	3,310
	Sci 3,000	3,600	3,600	3,800	4,150	4,350
	Med 5,000	6,000	6,600	7,000	7,650	8,050

Sources : (1) Overseas Student Trust (1979). Overseas Students and Government Policy, Appendix 1.
(2) Overseas Student Trust (1982). A Policy for Overseas Student, Appendix A Table A.17
(3) Commonwealth Secretariat (1986). Commonwealth Student Mobility Fifth Report, Attachment I Table A2.

Another core question is the distribution pattern of Hong Kong students among different fields of study. Since there is little published statistics on the fields of study of Hong Kong students in Britain. The only information are the distribution pattern of Hong Kong students who have registered with the HK Government Office in London between 1976 to 1979, and the distribution pattern of commonwealth students between 1980/81 to 1984/85. It is assumed that the distribution pattern of Hong Kong students between 1980/81 to 1985/86 is similar to that of the commonwealth pattern.

Table A 3 Hong Kong Students in British Universities
Distribution by fields of study (%)

	1976/77*	1977/78*	1978/79*
(1) Agriculture, Forestry and Veterinary Science	0.4	0.5	-
(2) Professional and Vocational Studies	3.6	3.1	3.2
(3) Arts other than languages	7.2	7.2	6.8
(4) Science	14.9	17.8	20.0
(5) Education	2.9	2.7	3.2
(6) Engineering & Technology	41.3	38.5	37.0
(7) Languages, Literature and Area Studies	1.2	0.2	0.9
(8) Medicine, Dentistry and Health	5.8	5.8	5.2
(9) Social, Administrative and Business Studies	22.7	24.0	23.7

	1979/80 *	1980/81	1982/83	1984/85
(1)	0.25	1.8	2.3	1.9
(2)	4.90	3.1	4.1	3.2
(3)	5.80	2.1	2.0	5.4
(4)	17.60	19.6	16.9	16.0
(5)	5.60	6.3	7.2	23.0
(6)	35.80	33.2	29.7	11.1
(7)	1.50	2.7	2.4	6.4
(8)	4.70	9.4	10.3	7.6
(9)	23.80	21.7	25.2	25.4

*Percentages given are those who have registered with the Student's Section of HK Government Office, London.

Sources : (1) British Council Statistics of Overseas Students in United Kingdom Various editions.
(2) Hong Kong Education Department Annual Summary various editions

For the purpose of calculating tuition fees of Hong Kong students, it is necessary to group certain subjects under three categories - arts, science and medicine. The result is summarized in the following table.

Table A 4 Percentage Distribution of Hong Kong
Students in British University Courses,
1980/81 to 1985/86 (%).

	1980/81	1981/82	1982/83	1983/84	1984/85	1985/86
Arts	32.8	36.8	36.8	60.2	60.2	60.2
Science	57.7	53.0	53.0	32.2	32.2	32.2
Medicine	9.4	10.3	10.3	7.6	7.6	7.6

Notes : (1) Arts courses - Arts other than languages, Education, Languages, Literature and Area Studies, Social Admin. and Business Studies.
Science courses - Agriculture and Vocational Studies, Science, Engineering & Technology.
Medicine courses - Medicine, Dentistry and Health.
(2) For the year 1981/82, it is assumed to be similar to the year 1982/83. For the years 1983/84 and 1985/86, it is assumed to be similar to the year 1984/85.

Source : Table A3

Since British universities charge different fees for different fields of study, a central question in estimating the average cost is the distribution of Hong Kong students over different fields of study. For a Hong Kong student to study in a British university, the weighted average tuition fee represents an attempt to weigh the tuition fees of each subject course by the probability of studying that subject course.

Table A 5 Weighted Average Tuition Fees of Hong Kong Students in British University, selected years.

	1981	1986
Probability of studying		
arts	0.33	0.61
science	0.58	0.32
medicine	0.09	0.08
Tuition fees of (£)		
arts	2,000	3,310
science	3,000	4,350
medicine	5,000	8,050
Weighted average tuition fees	2,857	4,050

Notes : (1) Probability of studying a particular subject course is according to the percentage distribution of Hong Kong students in that subject course.

(2) Weighted average tuition fees :

1981 - $(£2,000 \times 0.33) + (£3,000 \times 0.58) + (£5,000 \times 0.09) = £2,857$

1986 - $(£3,310 \times 0.61) + (£4,350 \times 0.32) + (£8,050 \times 0.08) = £4,050$

Sources : Tables A2 and A4.

The weighted average tuition fees, £2,857 (1981) and £4,050 (1986) represent the probability of a Hong Kong student paying overseas university tuition fees in Britain.

Another source in financing Hong Kong students in Britain is the United Kingdom-Hong Kong Joint Funding Scheme. The scheme came into operation in 1983, which was supported by equal contributions from the two Governments. One of the aims was to assist Hong Kong students attending first university degree, to meet the difference between the home and overseas fees.

Table A 6 Weighted Average Grants Receiving
By a Hong Kong Student in U.K. (£)

Grants amount	No. of 1st degree HK students		Prob. of average grants receiving by a student	Shared by Hk or UK Gover.
(1)	(2)Univer	(3)P.E.Inst.	(4)=(1)/(2)+(3)	(4)/2
1985/86	3,006,283	3,580	806	685
				342.5

Sources : (1) Education Department. (1986). Annual Report
(2) Table A1
(3) University Grant Committee. (1986). University
Statistics - Students & Staff. Vol. 1

Appendix B

Hong Kong Students in Canada

Canada is another common destination for Hong Kong students studying abroad. Data for Hong Kong students in Canadian education sectors between 1976 and 1986 are shown in table B1. There were 7,661 Hong Kong students in Canadian university in 1985/86.

Table B 1 Enrolment of Hong Kong
Students in Canadian University
1976 to 1986

	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Enrolment	3,761	9,027	9,397	7,000*	5,791	5,173
	1981/82	1982/83	1983/84	1984/85	1985/86	
Enrolment	6,887	8,188	9,321	9,168	7,661	

* Estimated figure

Sources : (1) Commonwealth Secretariat. (1986). Commonwealth Student Mobility Fifth Report. Table A7, A8.
(2) Statistics Canada. (1987). International Student Participation in Canadian Education. Table A3.

Since tuition fees and distribution of student population vary in different regions of Canada, tables B2 and B3 provide each region with specific tuition rates and percentage distribution of Hong Kong students in Canadian universities.

Table B 2 Distribution of Hong Kong Students
in Canadian Universities By Province,
selected Years (%)

	1975/76	1983/84	1985/86
(1) Manitoba, Newfoundland, Saskatchewan	12.40	6.48	26.14
(2) Alberta, British Columbia	21.99	37.50	26.78
(3) Ontario, Quebec	57.41	49.00	40.91
(4) Maritimes	8.20	7.00	7.28

Sources : (1) Hang Seng Bank. University Guide of Canada. 1983 and 1987 editions.
(2) Von Zur-Muehlen, Max. (1978). Foreign Students in Canada and Canadian Students ABroad. Table 30, C-3.

Also a simplified fee structure in Canadian university has been derived for selected years by grouping certain provinces under one category.

Table B 3 Simplified Median Tuition Fees
Structure of Canadian Universities,
Selected Years (CN\$ thousands)

	1975/76	1983/84	1985/86
(1) Manitoba, Newfoundland, Saskatchewan	550	900	1,550
(2) Alberta, British Columbia	600	1,100	2,700
(3) Ontario, Quebec	770	3,550	7,200
(4) Maritimes	500	1,500	3,200

Sources : (1) Tillman. (1986). "Canada" edited by Stephen Shotnes in International Comparisons in Overseas Student Affairs UKCOSA p.26 Table 4
(2) Statistics Canada. (1987). International Student Participation in Canadian Education Table B6
(3) Hang Seng Bank. (1976). University Guide of Canada. p.107

Also applying the similar approach in Appendix A, an weighted average tuition fees may be calculated according to different regions.

Table B 4 Weighted Average Tuition Fees of Hong Kong Students in Canadian University, Selected Years.

	1975/76	1983/84	1985/86
Probability of studying in			
Region 1	0.12	0.06	0.26
Region 2	0.22	0.38	0.37
Region 3	0.57	0.49	0.41
Region 4	0.08	0.07	0.07
Mean tuition fees (CN\$) :			
Region 1	550	900	1,550
Region 2	600	1,100	2,700
Region 3	770	3,550	7,200
Region 4	500	1,500	3,200
Weighted average tuition fees (CN\$)	683	2,315	4,577

Notes : (1) Probability of studying in a particular region is according to the percentage distribution of Hong Kong students in that region.
 (2) Region 1 - Manitoba, Newfoundland and Saskatchewan
 Region 2 - Alberta and British Columbia
 Region 3 - Ontario and Quebec
 Region 4 - Maritimes
 (3) Weighted average tuition fees :
 For the year 1975/76 -
 $(550 \times 0.12) + (600 \times 0.22) + (770 \times 0.57) + (500 \times 0.08) = 683$
 For the year 1983/84 -
 $(900 \times 0.06) + (1,100 \times 0.38) + (3,550 \times 0.49) + (1,500 \times 0.07) = 2,315$
 For the year 1985/86 -
 $(1,550 \times 0.26) + (2,700 \times 0.37) + (7,200 \times 0.41) + (3,200 \times 0.07) = 4,577$

Sources : Tables B2 and B3

Data for the estimation of the living costs of overseas students in Canada are rare. In 1975, Statistics Canada carried out a survey of post-secondary students which provided information on their

expenditure patterns. The expenditure pattern of overseas students was probably similar (Von Zur-Muehlen 1978 Table 34). In 1982/83, the average expenditure for room and board was around CN\$ 2,500 (Hang Seng Bank 1983). If other expenses are taken into account, this figure might double to about CN\$ 5,000. In adjusting the inflation of such value to 1983/84, the average living costs will probably be CN\$ 5,323 (Statistics Canada 1983 Consumer Price Index - 112.9 in 1982 and 120.2 in 1983). Another survey by the Canadian Bureau for International Education estimated that living cost of overseas students was between CN\$ 7,500 and CN\$ 18,000 for twelve months in the academic year 1985/86, depending on province and institution of study (Holroyde 1986). For the purpose of estimating living costs, take the mean value CN\$ 12,750 as reference. However, it is only possible to give us a rough approximation of the expenditures of Hong Kong students in Canadian universities for selected years. The results are tabulated in table B5.

Table B 5 Living Costs of Overseas Students
in Canadian Universities. (CN\$)

	1975/76	1983/84	1985/86
Living Costs	3,023	5,323	12,750

- Sources : (1) Hang Seng Bank. (1976). University Guide of Canada.
 (2) Holroyde, D. (1986). Overseas Reflections - An Australian Perspective on Aspects of International Education. WAIT.
 (3) Von Zur-Muehlen, M. (1978). Foreign Students in Canada and Canadian Students Abroad. Table 3.4.

Appendix C

Hong Kong Students in Australia

Hong Kong has a long time been the second largest source country of overseas students in Australian universities, accounting for some 11% in 1985 of the total number.

Table C 1 Hong Kong Overseas Students in
Australian Tertiary Institutions, 1976 to 1985

Year	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
Enrolment	421	574	662	884	1,131	1,122	1,139	1,388	1,658	1,678

Sources : (1) Commonwealth Secretariat. (1986). Commonwealth Student Mobility Fifth Report. Attachment I Table A1.
(2) Fraser. (1984). "Australia and International Education" Vestex v27 n2 Table 3.
(3) Tracey. (1986). "Australia" edited by Stephen Shotnes in International Comparisons in Overseas Student Affairs UKCOSA Table 2.

As stated previously in chapter two, it is noted that tertiary education in Australia is virtually free in 1970s. The tuition fees for overseas students imposed, commencing with the academic year 1980, ranged between A\$ 1,500 and A\$ 2,500 (see table 2.1 p.20).

Since Australian universities charge different tuition fees between medical course and others, it is necessary to estimate the distribution pattern of Hong Kong students. There is little published statistics on the fields of study of Hong Kong students in Australia. The only information is the distribution pattern of all overseas students in 1981. It is assumed that the distribution pattern of Hong Kong students is similar to the overall pattern.

Then, to multiply tuition fees with probability of studying different subject courses, the weighted average tuition fees will be calculated accordingly.

Table C 2 Weighted Average Tuition Fees of Hong Kong Students in Australian University, Selected Years.

	1981 to 1983	1986
Probability of studying		
Medicine	0.90	0.90
Others	0.09	0.09
Tuition fees, A\$		
Medicine	2,500	3,100
Others	1,500	2,500
Weighted average tuition fees	2,404	3,042

Notes : (1) Probability of studying a particular subject course is according to the percentage distribution of students in the subject course.

(2) Medicine-medicine, dentistry, veterinary science: 9.6%
Others-all other courses: 90.4%

(3) Expected average tuition fees :
1981 to 1983 - $(2,500 \times 0.9) + (1,500 \times 0.09) = 2,404$
1986 - $(3,100 \times 0.9) + (2,500 \times 0.09) = 3,042$

Sources : (1) Table 2.1

(2) Tertiary Education Commission. (1981). Report for 1982-84 Triennium. Vol.1 part 2 table 3.17.

The cost-of-living in Australia may be obtained from the 'University Guide of Australia' (Hang Seng Bank 1979 and 1986). In 1978 and 1985, the living expenses were estimated to be around A\$ 4,000 and A\$ 6,000 respectively. In adjusting the living costs by Consumer Price Index, the living cost would be A\$ 2,840 in 1975 and A\$ 5,215 in 1981 (Vamplew 1987 Table PC21-29 Consumer Price Index : 171.1 in 1975, 241.0 in 1978 and 314.2 in 1981).

Appendix D

Hong Kong Students in America

During the period between 1975/76 to 1985/86, enrolment of Hong Kong students in U.S. universities increased and peaked in 1977/78, but dropped in the late 70s and then it stabilized at around 10,000. Hong Kong has been among the top ten largest sending countries since 1960s.

Table D 1 Hong Kong Students in U.S.
Higher Education, 1975/76 to 1985/86.

Year	1975/76	1976/77	1977/78	1978/79	1979/80	1980/81
Enrolment	11,930	10,970	12,200	10,520	9,900	9,660

1981/82	1982/83	1983/84	1984/85	1985/86
8,990	8,610	9,420	10,130	10,710

Sources : IIE Open Doors. Various editions.

In the United States, there are over three thousand public and private colleges and universities. Because of the variations in institutional practices in dealing with specific budget items, and the effect of such variations on the tuition fees may diversify in broad range. Despite this confusion, the immediate answers of the overall tuition fees of foreign students are not easy to determine. For this reason it is important to explore ways by which to simplify the

situation. In order to estimate the average overall tuition fees, the state operated institutions - State University of New York is chosen for reference. The data of State University of New York is used because :

- (1) appropriate data is available;
- (2) the rate of tuition fees seems to be the mean value of the highest and lowest fees among other states;
- and (3) 2/3 of Hong Kong students were studying in public institution and the tuition fees among different state universities would be quite similar (IIE various editions).

Since Hong Kong students are treated as nonresidents, out-of-state tuition has been used.

Table D 2 Summary of Annual Tuition Charges
in U.S.A. University (U.S.\$)

Academic Year	Out-of-State Tuition
1972/73 - 1975/76	1,300
1976/77 - 1980/81	1,500
1981/82 - 1982/83	1,750
1983/84	2,650
1984/85 - 1987/88	3,200

Note : From 1972/73 through 1978/79 there was a tuition differential between lower division and upper division tuition rate was used for all years in this table.

Source: Central Staff Office of Institutional Research 1988
Trends in tuition fee and other basic student charges
1963/64 through 1988/89 with typical student costs
1980/81 through 1988/89 Report No. 19-88A
 State University of New York, Albany.

The estimated cost-of-living expenditures by overseas students in the United States are based on the recommended monthly maintenance rates (MMRs) from Institute of International Education. The MMRs are based on Bureau of Labor Statistics estimates of intermediate-level family budgets and comparative indexes of prices in selected urban areas, with adjustments to reflect inflation and special overseas students needs. Table D3 illustrates the estimated expenditures between the 1975/76 to 1985/86.

Table D 3 Estimated Academic Year Cost-of-Living
Expenditure in U.S. (in U.S. Dollars)

	1985/86	1984/85	1983/84	1982/83	1981/82	1980/81	1979/80	1978/79
Monthly rate	641	620	603	575	550	535	515	495
Yearly rate	7,692	7,440	7,236	6,990	6,600	6,420	6,180	5,940
	1977/78	1976/77	1975/76					
	480	465	450					
	5,760	5,580	5,400					
Sources :	(1) IIE	<u>Open Doors</u>	various editions					
	(2) IIE	<u>Costs at US Educational Institutions</u>	various editions					

Once again, it is necessary to ascertain the sharing of the cost burden among home country, U.S. country and personal/family. Since the statistics of the primary sources of funding about Hong Kong students in U.S. is not available, the only available information is the distribution pattern of primary sources of funding for all

overseas students in U.S. Hence it seems to assume that the pattern of Hong Kong students being similar to the overall pattern is a good way to simplify this problem.

Table D 4 Overseas Students by Primary Sources of Funding, Selected Years (%)

	1975/76	1980/81	1985/86
Personal/Family	67	70	72
US Country	23	17	17
Home Country	10	13	11

Note : Personal/family - Personal and family, current employment and others.

US Country - US College/university, US Government, US Private Sponsors.

Home Country - Home Government/university.

Sources : IIE Open Doors. Various editions.

The similar approach is applied as in the previous appendix in calculation the sharing of costs according to the probability of distributing the costs to different stakeholders : personal/family, US country and home country.

Table D 5 Weighted Average Tuition Fees and
Living Costs of Hong Kong Students in
U.S. University, Selected Years (US\$)

	1975/76	1980/81	1985/86
Probability of sharing total costs by :			
Personal/family	0.67	0.70	0.72
US country	0.23	0.17	0.17
Home country	0.10	0.13	0.11
Tuition Fees by :			
Personal/family	$1,300 \times 0.67 = 871$	$1,500 \times 0.70 = 1,050$	$3,200 \times 0.72 = 2,304$
US country	$1,300 \times 0.23 = 299$	$1,500 \times 0.17 = 255$	$3,200 \times 0.17 = 544$
Home country	$1,300 \times 0.10 = 130$	$1,500 \times 0.10 = 150$	$3,200 \times 0.10 = 320$
Living Costs by :			
Personal/family	$5,400 \times 0.67 = 3,618$	$6,420 \times 0.70 = 4,494$	$7,692 \times 0.72 = 5,538$
US country	$5,400 \times 0.23 = 1,242$	$6,420 \times 0.17 = 1,091$	$7,692 \times 0.17 = 1,308$
Home country	$5,400 \times 0.10 = 540$	$6,420 \times 0.13 = 835$	$7,692 \times 0.10 = 846$

Note : Probability of sharing total costs by different stakeholders is according to the percentage distribution of primary sources of funding.

Sources : Tables D2 to D5.

Appendix E

Hong Kong Students in Taiwan

E1 Number of Hong Kong Students

The number of Hong Kong students enrolled in Taiwan at institutions of higher education began to rise in the 1960s and 1970s. In 1987/88 there were 3,448 in universities and colleges.

Table E 1 Number of Hong Kong Students in
Taiwan Universities and Colleges,
Selected Years

	1975/76	1977/78	1978/79	1979/80	1980/81
University	1,824	1,700	1,953	2,145	2,583
College	228	403	432	461	380
	1982/83	1984/85	1985/86	1987/88	
University and College	3,703	3,371	3,480	3,448	

Sources : Bureau of Statistics. Educational Statistics
of Republic of China. Various editions.

E2 Description of Survey of Returned Hong Kong Overseas Students

A survey was carried out by Dr. Chung, Yue Ping of School of Education, The Chinese University of Hong Kong in June 1990. The aim of this survey was to gather information about the socio-economic

background of returned overseas students. A total of 299 returned students from U.K., U.S.A., Canada, Australia, Taiwan & China and other Countries constitute the respondents in this survey.

Some information about tuition fees of Hong Kong students in Taiwan university education may be provided by this survey. The following table lists the result of tuition fees :

Table E 2 Mean Tuition Fees per Year
in Taiwan University (HK\$)

Graduation period	1971-1975	1976-1980	1981-1985	1986-1990
Studying period	Before 1971	1971-1975	1976-1980	1981-1985
Mean Tuition Fees	2,200	5,700	5,400	10,600

N=202

In Taiwan, courses at university and colleges are of four years duration. It may be assumed that the new entrants in the period 1971-1975 would graduate in the year of 1976-80. Hence the average tuition fees per year in Taiwan university would be HK\$ 5,700 in 1975/76, HK\$ 5,400 in 1980/81 and HK\$ 10,600 in 1985/86 respectively.

Another survey was carried out by telephone interviews, based on questions in the following areas :

- (a) the period of study,
- (b) the name of university, together with details of subjects

studied,

- (c) the amount of expenses during the period of study :
tuition fees, living expenses and traveling costs.

The survey was intended to find out the sources of support and pattern of expenditures of Hong Kong students in Taiwan university education.

Table B4 Information of Sources of Funding and
Cost-of-Expenditure in Taiwan

Case	Study Period	University	Sources of Funding	Amount of Funding from Hong Kong (HK\$ per annum)	Costs-of-expenditure (NT\$ per annum)		
					Tuition	Living	Traveling
A	1975-79	NTU (Physical Educat.)	P, A	1,500	3,000-5,000	15,000-20,000	3,200-5,0
B	1976-80	NTCE (Education Psych.)	P, G	2,200-4,000	---	18,000-24,000 (1976) 24,000-36,000 (1980)	3,500(197 5,500(198
C	1977-81	NTU (Plant Pathology)	P, A	7,000-8,000	4,000-6,000	50,000-60,000	3,000-5,0
D	1978-82	NTCE (Art & Design)	P, G	5,000	---	24,000-36,000	3,200-5,2
E	1978-82	NTCE (Psychol.)	P, S, SJ	1,000	---	24,000	5,700(1982
F	1979-83	NTU (Horticulture)	P, A	3,000-5,000	6,500-7,000	25,000	5,200(1979 6,000(1983
G	1980-84	NTU	P, S	3,500-5,500	6,800-8,000	30,000	5,500-6,50
H	1981-85	NTCE	P, A, SJ	4,000-6,000	---	35,000	6,000-7,00

Note : NTU - National Taiwan University NTCE - National Taiwan College of Education
P - Family A - Assistantship G - Taiwan Government S - Scholarship SJ - Summer Job
Traveling Costs - By air in economic return ticket.

As indicated in the above table, it is estimated that the living costs of a Hong Kong student in Taiwan would be as follows:

Table E5 Cost-of-living in Taiwan
per Annum (HK \$)

Year	1975/76	1980/81	1985/86
Living Costs	1,500	3,500	6,000

N=8

Appendix F

Traveling Expenses of Hong Kong Students

The traveling expenses usually refer to single air ticket of new entrants in economy fare to the destination place. The exact locations of students' universities are in different regions of the hosted countries. In the present information, it is not enough to identify the exact location of the individuals. It is simply assumed the average traveling expenses from Hong Kong to the following cities as the final destinations of individual countries : (1) Britain - London, (2) Australia - Sydney, (3) Canada - Vancouver and Toronto, (4) U.S.A. - San Francisco and New York, and (5) Taiwan - Taipei. For Canada and U.S.A., it is further assumed the traveling expenses as the mean value from Hong Kong to Vancouver and Toronto, to San Francisco and New York respectively.

Table F 1 Travelling Expenses from Hong Kong
to Five Hosted Countries,
1975/76 to 1985/86 (HK\$)

Year	U.K.	Canada	Australia	U.S.A.	Taiwan
1985/86	2,650	3,325	2,800	2,675	800
1984/85	2,300	3,150	2,800	2,465	800
1983/84	2,150	2,550	2,300	2,450	700
1982/83	2,100	2,375	2,200	2,125	700
1981/82	1,950	2,125	2,050	2,100	680
1980/81	1,950	2,125	2,050	1,975	680
1979/80	1,800	2,000	2,000	1,975	600
1978/79	1,800	1,990	2,000	1,950	600
1977/78	1,650	1,990	2,000	1,900	600
1976/77	1,650	1,975	1,900	2,100	550
1975/76	1,600	1,925	2,000	1,925	550

Sources : Sing Tao Jih Pao

Note : The prices of the airfare are estimated on September of each year.

To convert the traveling expenses from Hong Kong dollar to different currencies in different years, the following exchange rates will be used :

Table F 2 Exchange Rates
(Hong Kong Dollar per unit of Foreign Currency)

	Uk (£)	Canada (CN\$)	Australia (A\$)	USA (US\$)	Taiwan (NT\$)
1985	11.27	5.60	5.34	7.811	0.189
1980	12.27	4.32	6.06	5.130	0.137
1975	10.21	4.96	6.32	5.035	0.133

Sources : Hong Kong Annual Digest of Statistics. (1984, 1986).
Table 9.12

APPENDIX G

Enrollments and Expenditure of Hong Kong Universities

As noted in the UPGC reports, Government policy for expansion and development of student annual growth rate at two universities was around 4% over the period from 1972 to 1987 (UPGC reports 1974 para 18, 1980 para 11-14), in which the opportunities to commence at the first-degree level of the mean number in the 17-20 year old age group in 1982 was 2.4%, then increased to 4.8% in 1986.

Table G 1 Total Enrolments and Number of
New Entrants of First-degree
Courses in Hong Kong University
1974/75 to 1985/86

Year	Total Enrolment	New Entrants
1985/86	10,893	3,209
1984/85	12,372	3,083
1983/84	9,847	2,933
1982/83	9,379	2,884
1981/82	9,046	2,672
1980/81	8,950	2,612
1979/80	8,623	2,439
1978/79	8,362	2,548
1977/78	7,853	2,293
1976/77	7,267	2,262
1975/76	6,913	2,114
1974/75	6,409	2,083

Source : UPGC Report various editions

In 1974/75, the recurrent expenditure of both universities was HK\$ 157.08 million, and then steadily increased to HK\$ 1052.86 million in 1985/86. Capital grants are considered for campus development at the institutions of higher education. Details of

recurrent expenditures and capital grants of two universities appeared in the following table.

Table G 2 Recurrent Expenditure and Capital Grant of Hong Kong Universities, 1974/75 to 1985/86 (HK\$ million)

Year	Recurrent	Capital
1985/86	1,052.86	139.34
1984/85	847.80	160.00
1983/84	845.70	137.05
1982/83	749.70	113.76
1981/82	573.20	122.25
1980/81	453.16	138.77
1979/78	330.91	96.02
1978/79	268.00	54.03
1977/78	257.70	8.47
1976/77	197.68	8.14
1975/76	161.50	26.93
1974/75	157.08	22.11

Sources : UPGC Reports

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